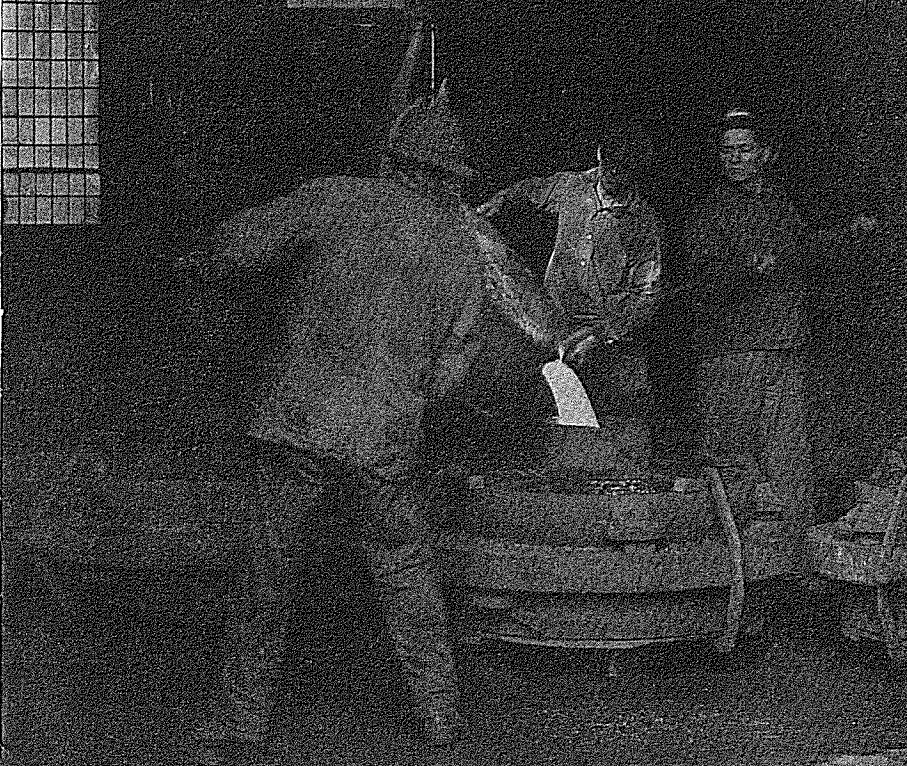


Southern Pacific Bulletin

FEBRUARY 1922



SACRAMENTO GENERAL SHOPS NUMBER

The Bulletin

VOL. XI.

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TABLE OF CONTENTS

Cover Illustration	PAGE
A detail scene from the Sacramento General Shops A corner in the wheel foundry	
How Employees May Buy S. P. Capital Stock	3
From Bolts to Walking Beams at Sacramento	4
No Increase in R. R. Expenses from Sale of Oil Lands	8
Musicians at Sacramento Win Recognition	9
Railroads Ask Square Deal and Fair Return	11
By Wm. Sproule	
Impressions of an Australian Railroader	13
By N. J. Canny	
Fireman Urges Jitney Taxation	14
First Unit of Immense Stores Plant Occupied	15
By E. Harly	
Where Will They Get the Money?	17
By G. W. Luce	
Concerning Too Much Nerve	19
By Orian C. Shown	
Editorial	20
Christmas Celebrated on Train	21
Big Master Scale Installed	22
By G. A. Easton	
Department of Safety	24
Truckee Winter Sports Lure Snow Strangers	27

The Bulletin is Published Monthly in the Interest of and Distributed Free to the Employees of the Southern Pacific Company. Contributions are invited and should be addressed to the Editor, Bureau of News, 65 Market Street, San Francisco, California

THE BULLETIN

3

How Employees May Buy S. P. Capital Stock

Plan Provides that Those Who Desire May Purchase Shares On Easy Installments and Become Part Owners in the Company

President Wm. Sproule authorizes publication in the Bulletin of the following statement concerning the Plan for purchase of Southern Pacific Company capital stock, recently announced by J. Kruttschnitt, Chairman, Executive Committee of the Board of Directors of this Company, to employees of the Southern Pacific Company and Proprietary Companies whose lines form a part of Southern Pacific Transportation System.

BEGINNING February 1, 1922, employees are offered opportunity to buy shares of the capital stock of the Company on easy terms. This is a plain business proposition, providing a convenient way for all officers and employees who desire to set aside regularly a part of their pay for investment in Southern Pacific capital stock, so they may thus become part owners as well as employees.

The Company makes no appeal to employees to purchase stock. No employee will be either favored or discriminated against because of his purchase or failure to purchase stock under this purely voluntary plan. Employee purchasers, or their estates, are protected against loss in event of death or permanent disability or in case of leaving the service of the Company, voluntarily or otherwise.

The Company has no stock in its treasury. All of its stock is in the hands of the public (about 54,000 holders), and the present proposal is intended to make it easy for employees to buy Southern Pacific stock in the open market.

The Company, of course, cannot control the future market price of the stock or the amount it will be able to pay in dividends, as earnings largely decide that.

Here is the plan: Any employee may apply for the purchase of from one to fifteen shares of stock, according to his ability to pay for it. If, after having begun the purchase of a less number than fifteen shares, an employee desires to buy additional shares to the limit of fifteen, that can be arranged for him. After having completed any specified purchase the employee may then begin to buy additional shares, but under no circumstances may an employee be buying, under this plan, a total of more than 15 shares at any one time, although he is not limited as to the total number he may finally purchase.

To take advantage of the plan the employee should make application on the regular forms provided by the Company through his immediate employing officer, by whom such application will be sent without delay through the proper channels to the Controller of the Company at New York. The Controller will then arrange for the Treasurer to purchase at once the designated number of shares at the market price on the New York Stock Exchange and the employee will be sent a statement as to the cost. No charge is made for this service.

The stock will be paid for by the employee at the rate of \$5 a month on each share until the purchase is completed, such payments to be deducted from his wages once a month. However, the employee has the privilege of paying off in lump sum the unpaid balance on his stock at any time.

The Company will charge the employee 6 per cent interest on the cost of stock purchased for his account, but will credit him with dividends paid on the shares held for him. Dividends have been paid regularly since June 30, 1907, at rate of \$1.50 a quarter, or \$6 a share annually. At the market price of the stocks when this is written, about \$81.50, this rate of dividends gives a return of not quite 7 1/2 per cent on the investment. Thus, dividends will more than offset charges made for interest.

These dividends are payable to stockholders according to record of the Company at close of business on last day of second month preceding the month in which dividend is payable. For example, a stockholder to receive the dividend payment on April 1st, 1922, must be owner of the stock at close of business on last day of February, 1922, and be so shown on the books. Any stock purchased and transferred on the books of the Company between the last day of February and first day of April will not be entitled to receive dividend payment on April 1st, but will receive dividend payment due July 1st.

Failure to pay three successive installments by an employee who remains in the service will terminate that employee's right to complete the purchase. In such a case the stock purchased for his account will be sold at the market price and the resulting balance paid to the employee in cash.

In the event of permanent disability or death of an employee before his stock is fully paid for, the employee or his estate may complete the purchase in monthly installments or lump sum and receive the stock; or may receive the number of shares then fully paid for, and any fractional amount left over in cash.

In case an employee leaves the service of the Company, voluntarily or otherwise, he has the option of paying off the unpaid balance in cash and receiving the entire amount of stock being held for him, or of receiving the number of shares then fully paid for and any fractional amount left over in cash.

The Company reserves the right to amend or withdraw this stock purchasing plan at any time; provided, however, that any such amendment or withdrawal shall not apply to stock purchases already made for account of employees.

The stock purchasing plan is available to all employees, including officers, of the Southern Pacific Company and all Proprietary Companies whose lines form a part of the Southern Pacific Transportation System.

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From Bolts to Walking-Beams at Sacramento

Wide Range of Activities Found at Our General Shops. Came Into Existence with Pioneer Road and Grew with Southern Pacific Lines

By A. D. WILLIAMS

Superintendent Motive Power Northern Division

WHENEVER one pauses to consider the history of the organization and growth of the Southern Pacific Company, the Sacramento General Shops should be remembered, for they sprang into existence with the parent organization, the Central Pacific Company, in 1863 and have kept pace with the growth of the Southern Pacific Lines.

In 1863 these shops employed about 15 men in the Car Department and about the same number in the Locomotive Department. The first permanent buildings were erected in the years 1868 and 1869 and formed the nucleus of the present plant. The shops now cover an area of approximately 145 acres and employ a normal force of 3100 men, this growth spreading over a period of over half a century.

Since the beginning repair work on locomotives and cars has been taken care of and the production of new equipment followed up at the same time. The first locomotives to be built at these shops were 10 freight locomotives and two passenger locomotives in the years 1872 and 1873. From then to 1888 a large number were built, the most of them being "Monkey Motions." These did away with the "Stephenson" or link motion, and were quite similar to the "Walschaert" motion of today. During the world war the difficulty of obtaining rolling stock and the high price of the same made it imperative that we help ourselves and from 1917 to the present time 53 locomotives have been constructed in these shops.

First "Twelve Wheeler"

In 1882 a "Twelve Wheeler" was built which was at that time the heaviest locomotive owned by this company. It weighed 69 tons and had a tractive power of 29,140 lbs. Today we have single engines weighing 193 tons with a tractive power of 75,150 lbs. and Mallet or articulated engines weighing 219 tons with a tractive power of 94,880 lbs.

The first passenger cars operated by this company were shipped around Cape Horn in sections as were the locomotives and put together at Sacramento. These cars were 42 ft. long, little larger than a box car, with flat roofs and wooden seats of the plainest character. Since then constant improvements have been made. In 1847 twenty first class passenger coaches were built which were acknowledged at that time for design and workmanship to be the best and neatest in America. Many cars have



A. D. WILLIAMS

been built since but none have given better service or longer life. Several of these cars are still in existence in our Maintenance of Way service.

The first private car was built about this time for Supt. A. M. Towne. In 1876 a number of short street cars were built for use in San Francisco as there were no car builders on the coast at that time. In 1883 the car "Stanford" was built for the sole use of the late Governor Stanford. This car when received at Washington was acknowledged by all eastern car builders to be the finest and best built car in America. Every convenience which could be thought of at that time was installed in this car. The interior was finished with choice woods. The frame work was of white oak and the workmanship of the best. In 1906 this company built its first all steel passenger car. This car is No. 1806 and is still in service. The next year we built an all steel postal car, C. P. 4097 besides having an all steel body and underframe the inside lining was of fireproof construction and an electric lighting system was also applied. This car is still in service and no material changes have been made in it.

A very large number of freight and non-revenue cars have been constructed in the last 40 years. In the last four years about 3000 have been constructed.

Steamer Machinery

While a good many of the steamers which this company uses in the

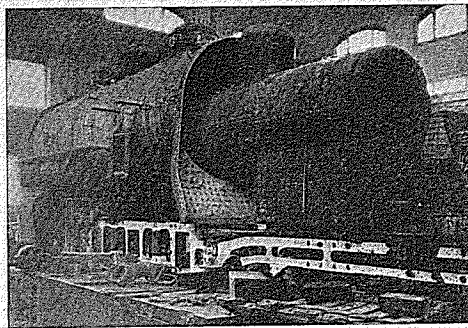
Bay and River service were purchased, a very considerable number of them have been built at the Company's ship yards in Oakland and the most of the metal work furnished from Sacramento shops. The boilers and all metal work for the steamer Solano with the exception of the engines proper and the wheel shafts were gotten out here. At the time this boat was built in 1879 it was the largest car transfer boat in existence. About the same time all the machinery, boilers and metal work for the river boats Modoc and Apache was gotten out at these shops. In later years the machinery and boilers for the Seminole, Navajo, Thoroughfare, Alameda, Santa Clara and Contra Costa were also built here.

In 1863 the shops proper consisted of a small repair shop for locomotives and another for cars. The machinery of the shop of Goss and Lambert on I street in Sacramento was utilized. Few years later this shop was taken over by the company and the machinery moved to the present site. An iron foundry was built which was put into operation in 1868. Since that time all the general iron casting used for cars, locomotives and steamer work have been made at Sacramento. The present foundry is divided into two sections, one specializing in wheels for freight cars and the other doing miscellaneous work.

The Wheel Foundry

When under full operation 300 standard wheels are made in the wheel foundry every day, requiring about 125 tons of molten iron. This is made from pig iron in a large furnace known as a cupola. This consists of a long steel shell, 90 in. in diameter, with a high stack. A lining of fire brick runs from the bottom to the top of the stack. Coke is thrown into this cupola, followed by a layer of pig iron, this method being followed until the furnace is full. A fire is then started at the bottom, and as soon as the lower layer of coke becomes ignited the air blast is turned on which strikes this hot coke. A very high temperature is thus obtained which is sufficient to melt the pig iron which drips into the furnace bottom. As soon as enough is collected the cupola is "tapped" and this metal allowed to run into a large pot. From this smaller amounts are taken for the pouring of the wheels. As the coke burns out and the iron melts more coke and iron are thrown in. This process continues through the day until the required number of castings have been made, when the

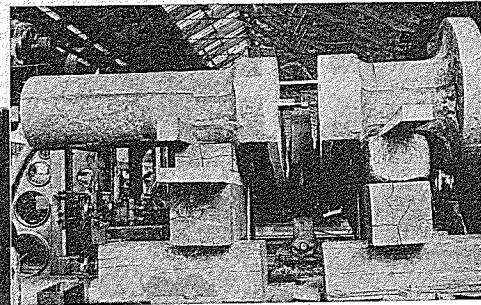
What the Camera Found at Sacramento Shops



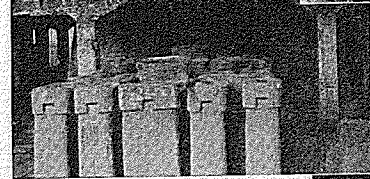
Difference in size of the boilers of Locomotive 1611 in service in 1883, and of Locomotive 4210, in service in 1911, is indicated above. Below, the pouring of steel from electric furnace into a ladle.



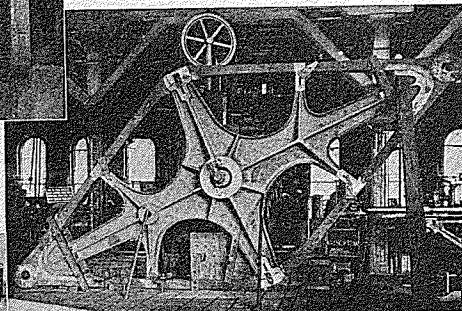
An apprentice-pattern-maker is shown above paying close attention to a machinist who is showing him some fine points.



Pieces of machinery of enormous size are handled at the Sacramento shops as shown by the picture above, the turning of crank pins for the steamer "Alameda."



Another big job is the finishing of the walking beam for the steamer "Newark," pictured at the right. The first steel car built by the Company is shown below. It was a product of the Sacramento shops.



air is turned off and the furnace cleaned, patched and made ready for the following day.

These wheels are made in sand molds, with a metal chill for the tread. When the metal is poured in this mold, the chill quickly cools it on the tread, making it "chilled" or very machineable. As soon as solidified these wheels are taken to the annealing pits for gradual cooling, which eliminates any danger of cracking or breakage from internal strains, set up by the quick cooling of the outer layer. After four days they are taken from the pits and inspected and are given various tests to determine their strength, etc.

The General Foundry

The general foundry makes all of the general castings, of which there are nearly a half million different patterns in use by this Company. Everything is made here from brake shoes to the largest steamer casting, weighing many tons. One of the castings for which the Sacramento foundry is noted is the locomotive cylinder. This casting is very intricate, besides being of large size, and requires most careful work.

Iron for the general foundry is melted in the same manner as in the wheel end, but here the quality of iron is very soft as most of the casting must be machined. Patterns for the jobs are placed in a box, known around. This pattern is then carefully withdrawn and the mold closed. After filling with metal it is allowed to stand until solid, when the casting is taken from the flask, the sand shaken free, and it is then sent to the clean-
either chipped or sandblasted free then ready for the machine shop. About 55 tons of metal a day are made into castings here during the rush season.

Brass Foundry

Brass as well as iron is very extensively used in all of our work. The earliest brass foundry work was carried on in one corner of the iron foundry. It was later moved to a building erected during the last year which has about 20,000 feet of floor space. Of the brass castings used for locomotives, cars and steamers, work about 95 per cent are made in this shop, the daily output of which has at times been as high as 15 tons. Castings are made here which weigh as

THE BULLETIN

little as one half an ounce while others weigh hundreds of pounds. Journal brasses are cast, machined and lined with babbitt in this shop and as they go out are turned over to the store department for delivery to all points on our lines. Different varieties of metal are made to suit the different demands from a strong "gun metal" to meet the demands of the steam

Success of Great Plant Reflects Spirit of the Workers

In connection with the story of the Sacramento General Shops, A. D. Williams, Superintendent of Motive Power, Northern District, writes:

BE it said after all, these shops and the vast machinery activities of which we write would be as naught, were it not for the royal, loyal men and women employed therein. The spirit of faithfulness, interest and earnestness manifested by these men and women in doing a livelihood and the joy gleaned from a worthy piece of work, is the measure of the success obtained and related.

So it is at Sacramento Shops, and, so it is in any industry, the real factor of success is the manifestation of the brain power of its employees. To these men and women then, of the rank, most supervision, mostly belongs the credit and honor for the accomplishments recorded herein.

bent inspection service to a "soft brass" which is to be manufactured into trimmings.

Steel Foundry

Steel, the master metal, has been the deciding factor in the world's development. From the days of the ancients, when steel was made in crude air-blown retorts, to the present time, numerous changes in the manufacture of steel have been made, some to increase tonnage, some to improve quality. The latest of these developments is the electric furnace and the largest installation west of Chicago is in the Sacramento shops.

This furnace is composed of a heavy cylindrical, steel shell, lined with brick and having a brick roof. The bottom is made of a material known as magnesite, burned into a nonolithic mass, shaped like a saucer. In addition to the furnace itself, there are innumerable auxiliary appliances for lifting the furnace, regulating the electric current, etc. At the present time this one furnace is making about 750 tons of steel a month, pouring 7 to 8 tons at a time. Of this about 20 tons a month go into metal castings for use in the rolling mill. Another one of our industries as

distinguished from the repair shops proper, is the rolling mill. The late Charles Crocker, one of the builders of the Central Pacific Railroad, said, "I do not see why we cannot make machine shops." Working on this assumption a 12-inch rolling mill was built in 1878. At that time practically all rolled iron came "around the Horn" a long, slow journey. There was plenty of scrap material all around us and when the original mill was built we were able to help ourselves in the matter of bar iron and did not have to wait for deliveries. This industry has now developed, until we have two 12-inch and two 18-inch mills served by 8 large reverberatory furnaces and with these we roll practically all the bar iron and steel that is used by this Company between the sizes of 1/4-inch round or square to 3-inch round, or 1 1/2-inch by 6-inch in flat section. The manufacture of the plates the upkick of its thousands of miles of track is also the work of the steel foundry and rolling mill.

The ingots are cast in proper forms and delivered in carload lots to the rolling mill where they are rolled into long bars. These bars are then conveyed on a series of rolls to a gang punch that is equipped with special attachments which punches, loads and records the number of plates each car contains when loaded.

These mills roll 235 different sizes and shapes of merchant bars and the tonnage output is approximately 5,600,000 pounds per month.

Forge Shop

Another of our industries which is closely allied to the rolling mill is the forge shop.

A peep into the forge shop at the Sacramento General Shops will show you three mammoth steam hammers, four lighter steam hammers, two light hammers, five air bending machines, four forgings machines, one heavy forger, which are continuously in operation, turning out the forgings that are used on the new locomotives and new freight equipment, that the Southern Pacific Equipment Co. is now building.

Besides the forgings for the new equipment, this shop is turning out forgings of all descriptions for the repair to the locomotives and cars of the Pacific System. Some of the different articles manufactured in this department are locomotive main and side rods, spring hangers, brake beams, rudder stocks, equalizers, draw

bars, draw bar yokes, brake hangers, arch shoes, brake rods, brake chains, clips, shoe keys, pins, clamps, roof steps, truss rods, break shafts, stay bolts and other forgings too numerous to mention.

The heavier forgings which are made for the floating equipment and the company's largest locomotives are forged from heavy ingots, under the three mammoth steam hammers. These forgings are then taken to the machine shop and finished. Many thousands of bolts are made daily in this shop for use in the manufacture and repair of cars and locomotives in the different structures scattered over our lines, and in the track itself upon which our freight and passengers are transported.

Frog Shop

About three years ago a building was erected for the making and repair of frogs, crossings and other track material. This work was done previously in the machine shop and from the repairing of picks to the building of the most complicated crossings is now centered in one spot. This relieved the machine shop of a large extent and made it possible to greatly increase the productive capacity of these shops.

Spring Shop

Sacramento Shops can boast of a spring shop as well as equipped as that of any railroad in the United States. Originally this work was done in one corner of the blacksmith shop. About thirty years ago it was moved to a building of its own, and this year sees it installed in a new and commodious building where there is room for considerable future expansion. When in its original quarters it employed 11 men and had a capacity of about 150 tons of springs made and repaired in a year. Now 40 men are employed in this shop and the capacity has been increased ten times. All kinds and characters of springs, from one weighing but a fraction of an ounce to a heavy locomotive spring weighing 635 pounds are made here.

Pattern Shop

The pattern-maker is one of

THE BULLETIN

Cover Illustration

AN activity found at only one place on the Pacific System—the making of car wheels—at Sacramento, is illustrated by the Bulletin's cover picture, showing the pouring of the metal in the wheel foundry.

The men who are pouring the liquid metal from the glowing ladle into the moulds are, reading from left to right, E. H. Cooper, molder, Tony Domich, helper, and John Pinto, helper.

The photograph was taken especially for the Bulletin cover by D. S. Joelyn, draftsman and photographer in the Sacramento Shops drafting room.

the most important men in the shops. The iron foundry, brass foundry and him to furnish the pattern from which their product is made. He must take the drawing or the sample and from must be a close and accurate work-drawing and in addition understand the work in these different shops so that when his pattern is completed the casting shop depends, for after the casting is made it must be finished in the machine shop and if his work has not been close and accurate it may be necessary to throw the casting away. In our pattern shop between 30 and 40 men are continuously employed and their work is the foundation for

the activities in the foundries and machine shops.

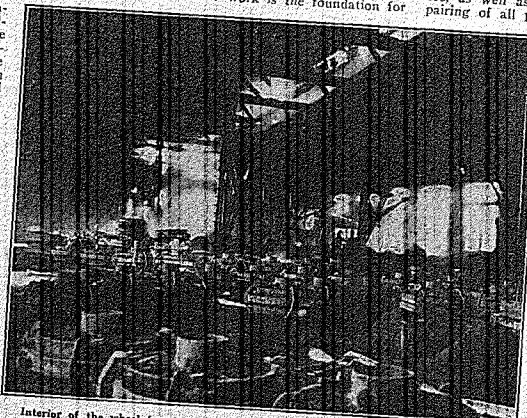
Saw Mill and Cabinet Shop

Another industry which is very important in the cabinet shop and saw mill. These shops manufacture the wooden parts for cars, both for freight cars and the finest passenger and private cars. During the past year getting out certain parts for new freight cars. In addition to this 7,800,000 feet were handled for other work consisting of parts for passenger and freight cars. In order for them to have an idea of what these shops do, it should be known that in the last year it has completed 200 office desks, made 340,000 feet of various kinds of moldings, 45,000 signal flag staffs, 19,000 freight car end and side posts, and other articles in like proportions.

General Machine Shop

This shop was first built in 1869. The size was doubled in 1872, and it was extended to its present length in 1883. In 1904 its capacity was almost doubled by adding a section the whole length of the shop for use as an erecting shop. The shop was turned into a bay for large tools and an electric crane was installed to serve them. In the new erecting shop a 240,000 pound crane was installed, which lifts the heaviest locomotives off and on their wheels. In addition a smaller crane is also used. This shop is equipped with machinery for handling all classes of work needed on our line, from turning the smallest pin to the finishing of the largest shaft or cylinder on our steamers, as well as the making and repairing of all parts on locomotives.

Here you will find a lathe which will take a shaft 30 feet long or turn a piece 76 inches in diameter. Adjoining this is the largest foundry in the installation, a double head slotter on which we can finish four locomotive frames at one setting. Next to this is a reversing motor planer which will take a job six feet long and 24 feet wide. On this planer all frames are planed before they go on the double head slotter just mentioned. The cylinders for locomotives as well as many large jobs are handled on two large Morton



Interior of the wheel foundry at the Sacramento General Shops. This is the only place on the Pacific System where car wheels are made. The wheels made here are of unusually fine quality.

ers which plane all sides, bore out the valve chambers and after the cylinders are bolted together plane a radius on the top to fit the smoke arch, by use of a machine feed which was designed here.

In addition to the above machines, this shop is equipped with many lathes, planers, shapers, vertical and horizontal boring mills, milling machines and drill presses of various sizes and capacities.

Historic Machine

The most interesting piece of machinery in the shop is a Brown & Sharpe milling machine which was purchased by the Central Pacific Railroad Co. in 1869 and has been continually in service up to the present time. This machine has been operated by the following old employees:

J. H. Andrews, 1870 to 1873.
R. A. Renwick, 1873 to 1876.
E. B. Hussey, 1876 to 1879.
H. Ingham, 1879 to 1886.
C. J. Little, 1886 to 1899.
E. S. Bechtold 1899 to 1911.

Since that time different men too numerous to mention have been turning out work on the little machine. There is only one other machine of this type known to be in existence and is now in a glass case in the factory of the manufacturers at Providence, R. I.

Another very necessary part of the machine shop is the tool room. The general idea of a tool room is that it is a place where tools are passed out to the workmen. This is correct but only reflects a very small portion of the activities. The tool room force not only passes out tools but must keep them in first class working order. They also manufacture new tools, not only reamers, taps and other small hand tools, but they make jigs for the expediting of duplicate work, punches and dies for our punches, presses, etc., to the extent of many thousands of dollars per year. While a large amount of money is spent on these tools it is money well spent as their use cuts down the bill for labor and cheapens the parts produced.

The Boiler Shop

The boiler shop is one of the most important shops at Sacramento. The boiler is the heart of the locomotive. Our boiler shop does not confine itself exclusively to the manufacture of locomotive boilers for boilers of any and all purposes are made and repaired here, and we have the reputation of making as fine a boiler as is made anywhere in the country. In addition to boilers, tenders, structural work, bridge work and a large variety of work where plate metal is used, I beams, channels and other shapes are fitted up in this shop. Rolls, punches, shears and drills here handle plates up to 1 1/4 inches in thickness. The plates and other pieces which make up the boilers are sheared, punched, rolled, flanged and otherwise worked until they are in proper shape to fit their respective locations. Close and accurate work is demanded

No Increase in R. R. Expenses from Sale of Oil Lands

Money Received Used to Increase Railroad Facilities, Thus Increasing Opportunity for Employment

IN a newspaper item appearing recently it was said that some employees believed the sale of Southern Pacific oil lands to the Pacific Oil Company has resulted in an increase in operating expenses of the railroad. The following are the facts:

The operating expenses of the Southern Pacific Company have not been increased one dollar through the sale of its oil lands; instead they probably have been decreased through some employees being paid by the oil company who were formerly paid by the railroad. Away back in 1903 the rule was established that the market price of oil used for fuel should always be charged in the operating expenses of the company. The company has not at any time paid more than the market price and it is at that price that it is now purchasing oil and charges are being made.

The practice of the company was adopted by the United States Railroad Administration. Three-fourths of the oil produced was and is light oil not suitable for fuel and it had to be sold for refining purposes at market prices and fuel oil purchased or exchanged for it on the basis of market prices.

The amount of money received by the Southern Pacific Company for

these oil lands was \$43,750,000. It has had this much more money to invest to provide additional railroad facilities, which means offering more opportunity for employment. In other words, this amount of capital has been released from oil lands where it was tied up and put into active railway service. It was not given to the bondholders or stockholders or anybody else, but has been put to work. The rate of dividend to stockholders of the Southern Pacific remains as it has been for many years, 6 per cent. Interest charges remain unchanged by this transaction, except that as the company has had this liquid capital on hand its need for borrowing money has been lessened.

The lands that were sold to the oil company were not a part of the Southern Pacific's property devoted to railway operation. The value of the land itself was not included in the valuation of the property on which a return is to be earned under the Railway Transportation Act, and its revenues and expenses were kept independent thereof. The company's fuel oil supply has been protected in connection with the sales whereby the company pays only the ruling market prices for its fuel oil.

both for steamers and locomotives as the United States sends inspectors to look after this work and see that it is performed in accordance with the rules and specifications laid down. The State of California also has its rules for the manufacture of boilers used in stationary service as well as for all tanks and drums to which pressure is applied. For these reasons if for no other it is necessary that the finest work be done.

Blacksmith Shop

While the rolling mill produces the bar iron and the hammer shop works out rough forgings with powerful tools it is still necessary to put the individual touch on nearly all forgings before they go to the machine shops for finishing. This calls for the expert work of the blacksmith and his helper and upon them depends in a large measure the cost of the work in the machine shop and also its safety when put into use on locomotives, cars and steamers.

Copper Shop

While the sheet metal shop is known as the copper shop, the working in copper is but a small part of its activities. This shop handles all steel below 3/4-inch in thickness. To

obtain an idea of the extent of work done we have only to look at the fact that during the last year over 300,000 pounds of galvanized iron were used. The large part of the metal used in this shop goes into tinware, as it is called, for use on all parts of the system. In making up this work, riveting has to a large extent been done away with. The sheets are fastened together by an electric spot welder which welds the two pieces together wherever they are touched. This also tends to cheapen the cost so that we are able to get out more and better work. Work which formerly required 5 hours to do by hand is now done on this welder in one hour.

Pipe Shop

Forty years ago the amount of pipe on a locomotive could be carried by a man on his shoulder. These pipes consisted of a feed pipe to carry the water from the tender to the pump, a blower pipe, and a heater pipe to warm up the water in the tender if necessary. Today it is doubtful if fifty men could carry the pipe in one of our large locomotives.

(Continued on Page 28)

Musicians at Sacramento Win Recognition

Glee Club, Band and Quintet Prominent in Life of Community, Aiding Charities and Public Movements. Center of Social Affairs

ALTHOUGH organized as recently as May, 1917, the Southern Pacific Band and the Southern Pacific Glee Club at Sacramento have a record that other similar industrial organizations may look at with envy. These two organizations in a little over four years have raised over \$14,000 for charitable purposes, have built up a music library valued at over \$3000, and have equipped themselves with uniforms valued at several thousand dollars, all through the initiative and resourcefulness of the members.

In Liberty Loan Drives

G. E. Lester, W. E. Thomas and H. E. Weida were the organizers of

club gave a concert at the Exposition Auditorium. The club is now planning its annual minstrel show which is a popular affair at Sacramento.

The glee club has a quintet which is in constant demand and gives frequent concerts. The quintet includes W. E. Thomas, director, H. Harter, G. E. Lester, T. L. Smith and V. T. Hodge.

the glee club which came into being at the time of the Liberty Loan "drives." Mr. Lester was asked once to provide vocal music for a bond drive meeting to be held the next noon. He secured some talent from the General Shops and after a half hour of practice was ready for the concert. The next day Mr. Lester met Mr. Thomas and Mr. Weida and it was decided to form a permanent organization. Rehearsals were started immediately. The work of the members of the band and glee club is purely voluntary.

Shortly after the band was organized a committee composed of workmen from the several shops was formed for the purpose of raising funds to uniform the band. They gave a ball which cleared \$1100 and the uniforms were then contracted for at a cost of approximately \$1400. Other entertainments followed the first ball, and the balance to cover cost of uniforming the band was soon raised.

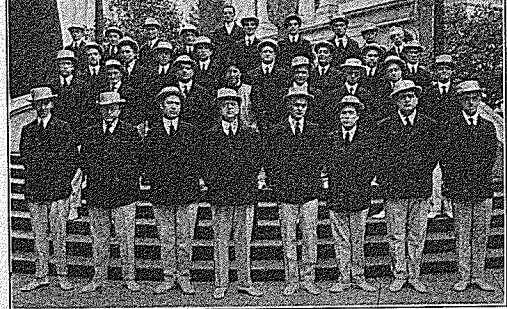
The dances and entertainments are always well patronized by



Sacramento shops band. Front row, left to right: W. Evans, Wm. Holt, D. Alonzo, C. Jensen, J. E. Weida, F. Cippa, J. Stonking, T. Keene, A. Last, S. Second row, left to right: F. Towsend, G. Benich, W. Wright, H. Westphal, W. Williams, C. Milner. Third row, left to right: N. D. Mages, G. Scott, F. Fisher, T. Connors, F. Keller, A. Benich, Thompson, Fourth row, left to right: W. Miller, J. Curry, D. Grant, F. Schrader.

The band has 38 members, including the drum major, and the glee club numbers 48 voices, both organizations being under the same musical director, J. E. Weida, Foreman of Locomotive Machine Shop No. 1 at the Sacramento General Shops. The band members all own their own instruments individually.

During the last year the band and glee club have given a number of concerts in Sacramento and in October came to San Francisco at the instance of Mrs. Minerva N. Swain, prominent in San Francisco musical circles, to take part in the Music Week program. The band gave a concert in Union Square and the glee



Glee Club, Sacramento Shops: Front row, left to right: L. James, S. Jensen, W. I. Goodwin, G. E. Lester, J. F. Davis, J. E. Weida, W. I. Graves. Second row: J. G. Niles, B. Manchester, P. Mondine, J. J. O'Hare, J. Nardelli, H. Savage, T. L. Smith, S. B. Curry. Third row: S. W. Watson, S. C. Morris, W. E. Nuttall, J. H. Hogan, H. Harter, C. B. Stocks, O. D. Manley, M. Shelton. Fourth row: J. A. Bayless, P. Guidoro, R. E. Johnson, W. J. Dorr, J. E. Weida, B. Boyd, W. A. Trevarthen, T. M. Nightwise, S. J. Dillon, W. E. Thomas.

Having read your Bulletin—Pass it along.



Sacramento Shops Quintet, left to right: V. T. Hodge, T. L. Smith, G. E. Lester, H. Harter and W. E. Thomas.

Southern Pacific officials and employees generally, as well as by the general public, both organizations having won quite enviable popularity considering the comparatively short time they have been before the public.

During the war period both band and glee club furnished music for many patriotic gatherings, especially during the several bond "drives," volunteering their services without charge. During one of these drives the band played 27 different engagements and the glee club sang almost an equal number.

A special train was run out of Sacramento on two different occasions, carrying the band and glee club and a corps of speakers, in the interest of the Liberty Loan, and although the territory through which these trains passed was said to have subscribed its full quota; and in some places had been oversubscribed, over a half million dollars in subscriptions was taken. On such occasions as these, the members of both the band and glee club were allowed their regular pay the same as if employed at their respective occupations in the shops. This is the only exception to the statement that services of the band and glee club are volunteered without charge.

The Company provides a rehearsal room located upstairs over one of the Car Department shops, the room being used jointly by the two organizations. The Company also provides special trains and free transportation to employees for excursions and picnics on different occasions, which has been another source of income for both organizations. Aside from this both are self-sustaining.

Uniforms Purchased

After organization of the glee club the question of suitable "uniform" or dress for public appearance naturally arose, it being finally decided to use white woolen trousers with fine pin stripe, with about one inch of black silk braid down each pants leg, a double-breasted blue serge coat, trimmed on the sleeves only, in black silk braid; hat of soft white felt, plain white shirt, soft collar and black four-

in-hand tie, white socks and white canvas shoes. This constitutes the uniform, with the exception of linen duster and small cane for street parades.

The club "uniform" was purchased with funds raised principally through a minstrel performance, or rather a number of performances given by the club, at a cost of about \$1300.

It is now a set custom for the band to give an annual ball and the glee club an annual minstrel show for the purpose of raising funds for the respective organizations. The glee club also makes a moderate charge for providing musical entertainment at lodge banquets or similar events, in this way assisting in keeping up the running expenses for music, etc., but for civic benefit affairs it has always gladly contributed their services, as has the band. The annual ball and minstrel show referred to, have been most gratifyingly successful in the past, with every indication of doing even better on future occasions.

S. P. Band and Glee Club Praised by Judges

Following is a portion of a letter written by Justices E. C. Hart, Albert G. Burnett and Wm. M. Finch, of the California District Court of Appeal, Third Appellate District, to J. E. Weida, musical director for the Southern Pacific Band and Glee Club at Sacramento.

"The organization is certainly a pronounced credit to the men through whose vigorous work and indomitable persistence it was directly brought into existence; it is equally a credit to the City of Sacramento, which can justly and proudly claim it as its own; it is, or must necessarily be, the pride not only of the co-workers in the shops of its promoters, but of the Southern Pacific Company under the auspices of whose employs it was inaugurated and is maintained."



Mrs. J. E. Weida, wife of the Musical Director, and Solist for the Club.

The band has a musical library that could not be duplicated today for less than two thousand dollars. It contains the cream of standard musical compositions, as well as a liberal sprinkling of the lighter grade music, including the "popular" numbers, the latter being constantly added to from time to time.

The glee club is also rapidly acquiring an excellent collection of music suited to its needs, so that at present it is in a position to furnish music suitable for most any occasion.

Christmas Carols

One custom of the glee club won instant approval at Sacramento, and that is Christmas carol singing. On Christmas morning at five o'clock, forty of the club, in automobiles, furnished by various club members, make the rounds of all the hospitals, city and county jails, to the houses of various of the city officials, railroad officials, to the homes of the shop employees who had been sick and were still unable to be out at their customary tasks, and to any place where it was felt a little music would bring cheer.

Christmas (1919) was the club's second season of carol singing, and long before Christmas inquiries came from hospitals, the orphanage and other institutions as to whether or not the club was going to sing carols, and if so, if the singers would like to have hot coffee and sandwiches or doughnuts ready for them. This was an agreeable surprise to the club, for starting out at five o'clock in the morning to sing in the open air surely puts an edge on the appetite.

The band, by special invitation, played a concert at the Assembly Attached Legislative Reception at Sacramento, March 26, 1919, and also played the grand march. The honor of playing on this occasion would

(Continued on Page 23)

Railroads Ask Square Deal and Fair Return

Talk of Earnings on Watered Stock is Babble as Return is Based on

I. C. C. Valuation of Properties Actually Used

By WM. SPOULE, President.

IN THE RAILROAD business 1921 is notable as the year in which the public entered with authority into the settlement of disputes in railroad services, with the managements and the men are unable to reach agreement among themselves on questions of wages and working conditions likely to interrupt the commerce of the Country.

In 1921 the principle prevailed that the right of men to strike for the purpose of stopping the service to the public is a blow at the public itself, and the public will not allow their business to be stopped or thrown into confusion by quarrels among railroad men.

So, in 1921 the United States Railroad Labor Board met a crisis in the railroad business of the country by exerting their authority in favor of the orderly procedure the Transportation Act of 1920 provides for settling such disputes, instead of discarding strike methods calculated to disturb the business of the people.

In the End Nobody Wins

The public have decided not to take any of the bludgeon blows in fights between men and managements, for in a railroad strike the public cannot stand out of the way but receive their share of the blows regardless of who wins, and in the end nobody wins.

In this decision, the Transportation Act of 1920 created the Railroad Labor Board. On this Board the men, the managements and the general public are equally represented. All of its nine members are named by the President of the United States. Three of them are selected by the President from a list of names submitted by the representatives of the railroad employees; three more are selected by him from a list submitted by the railroad managements; and the remaining three are selected by the President on his own initiative to represent the public.

On questions of wages the Act goes even farther than this equal representation of the three interests concerned, for it gives the public the final voice in the decision by a simple rule. This rule is that when the Board decides a question of wages or working conditions at least one of the public three must join in the majority decision.

Already the people have noticed that the Labor Board is a hard working and patient body. All railroad men concede that these men have to deal with hard problems and, though thus far their decisions have not given either the men or the managements all they contended for, both

prosper and grow. Men and women will not put their money into the railroad business unless they believe it will be allowed to earn a fair return, and under the Transportation Act the railroads are permitted to earn a return only upon the value of so much of their property as is used in the transportation business. The value of the railroad property is determined by the Interstate Commerce Commission, but since September 1st, 1920, no railroad is guaranteed a return upon this or any other valuation.

Because of this fact the talk about earnings on watered stock, on inflated values and all that sort of babble means nothing. Such talk is either designed to deceive or is the child or ignorance, since the return to the railroads can only be what they are able to earn upon this valuation of their property devoted to the public service of transportation.

While the problems of the railroads in these times require the highest type of business management, even such management will succeed to the extent largely that it enlists the public goodwill. And it can properly be said that regardless of differences that may arise from time to time between the men and the managements, both of them unite in their desire to give the public such good service, and to establish with the public such cordial relations, that the railroad business may advance through present adversities into the prosperity that will redound to the benefit of all concerned, along the path of better understanding.

Railroads Must Go Forward

Railroad men enter 1922, therefore, in a spirit of mutual hope and mutual help, in the feeling that the past five years have served to clarify railroad questions and that in the next five years it will become plain to all men that the railroads have to go forward in improvements and expansion in order to sustain the growth of this vast young country. That growth will require that large sums of new money be found to put into the railroad business, and to obtain that money we must have the public goodwill in favor of a reasonable rate of return upon the money.

The public interest is safeguarded in the use of that money by the rail-

R. R. Men and Managements Unite In Desire to Give Good Service

It can properly be said that regardless of differences that may arise from time to time between the men and the managements, both of them unite in desire to give the public such good service, and to establish with the public such cordial relations, that the railroad business may advance through present adversities into the prosperity that will redound to the benefit of all concerned, along the path of better understanding.

sides already begin to see the wisdom of Congress in lifting railroad labor disputes out of the strike zone into the zone of impartial Federal authority. That public opinion supports this view is already beyond debate.

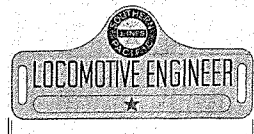
The railroads enter 1922 subject to this new jurisdiction and, with the knowledge that the public interest must always prevail, are bending every effort to have their roadbeds, rolling stock and equipment in condition that will justify the public expectation of good service.

Square Deal Is Asked

In return, the railroads ask the public to see to it that we are fairly treated; to see to it that we are not discriminated against either on the public highways or on the water ways or in taxation. We ask for a square deal. We know that under equal conditions we can serve the public well. We are sure that temporary diversions of business and temporary inequalities and unfair taxation are bound to be corrected, because the public perceives that in the long run good and reliable railroad service is a primary necessity. Perceiving this, they will also see that the railroad service they expect and want cannot be maintained unless the money devoted to the public in transportation gets a fair interest rate of return. Only a paying business can

roads because the latter cannot issue any kind of security for it without first getting the special consent of the authorities of Government. On the other hand, the railroads have no incentive to put money into the roads unless the facilities the money provides are of use to the public. Public use is the acid test of public need. The railroads wish to be responsive to the public needs for transportation, on the basis of a square deal and a fair return.

Offered Fuel Savers



As a further incentive for engineers and firemen to save fuel oil the Southern Pacific Company is awarding a gold-plated badge to the engineer and fireman standing highest in fuel performance in the best pool in through and local freight and passenger service.

In the event an engine man wins the award a second time a red enamel star will be inserted in the badge. The name of the winner together with the date of the award is to be inscribed on the back of the badge.

The award is to be made on three months' fuel performance beginning October 1, 1921.

FUEL SAVING FILM SHOWN ON S. P. ATLANTIC LINES

The Southern Pacific Company's motion picture, "Fuel Conservation," which has been shown at all of the principal terminals on the Pacific System during the past year, was exhibited at all of the principal terminals on the Southern Pacific Lines in Texas and Louisiana during the last month.

J. N. Clark, Chief of the Fuel Bureau, and E. W. Irwin, Manager of the Duplicating Bureau, accompanied the pictures and their itinerary called for a display of the films at El Paso January 9, concluding at New Orleans January 17.

This is the first showing of the "Fuel Conservation" films off of the Southern Pacific, Pacific System Lines.

Returning from New Orleans the pictures were to be taken over the San Diego and Arizona Lines and shown to employees of that property at San Diego.

LATEST FUEL SAVING LEADERS

THE SPIRIT of emulation and good natured rivalry is still increasing among Southern Pacific engineers and firemen in their endeavor to win recognition each month on the "Roll of Honor."

The word from those who are watching the race for the grand prize, that trip to Chicago, is not to give up trying, do not concede victory to the other fellow until you have at least made him feel that somebody else is in the race and that that somebody is in it to win.

The following engineers and firemen are those who made the best record for November in fuel conservation.

WESTERN DIVISION			
Engineers	Address	Firemen	Address
E. H. Baker	Oakland	D. W. Markey	Oakland
G. W. Marsh	Oakland	A. P. Griemert	Oakland
W. A. Belden	Oakland	F. C. Kenny	Oakland
C. P. Reed	Oakland	H. A. Wisler	Oakland
H. Congdon	Sacramento	R. F. Levi	Oakland
SACRAMENTO DIVISION			
M. Hurley	Roseville	J. H. Mueller	Roseville
J. W. Wright	Sacramento	I. W. Cox	Sacramento
J. A. Talley	Sacramento	A. F. Smith	Roseville
A. Rader	Sacramento	R. M. Sheehan	Sacramento
A. O. Nobel	Roseville	J. L. Sawell	Roseville
SALT LAKE DIVISION			
F. S. Gagin	Sparks	F. C. Grass	Sparks
H. J. Grubman	Sparks	C. L. Steiner	Sparks
C. Lehnert	Imlay	C. L. Steiner	Imlay
B. F. Corbiere	Sparks	W. Smith	Sparks
D. F. Canale	Sparks	W. Bedford	Sparks
J. Tomasek	Ogden	E. A. Broadbent	Ogden
O. J. Leves	Ogden	R. Reid	Ogden
J. J. Christensen	Carlin	J. V. Hutchinson	Carlin
SHASTA DIVISION			
T. L. Brown	Dunsmuir	I. R. Hurley	Dunsmuir
H. G. Fischer	Dunsmuir	A. H. Schoelch	Dunsmuir
R. A. Moore	Dunsmuir	O. Tuttle	Ashland
I. W. Thornton	Dunsmuir	A. A. Derby	Dunsmuir
W. A. Connell	Weed	V. G. Barathouse	Weed
PORTLAND DIVISION			
B. W. Riggs	Roseburg	G. R. Welch	Roseburg
F. Frederickson	Roseburg	A. Hevins	Roseburg
G. C. Jacobson	Roseburg	R. E. Kral	Brooklyn
A. M. Chamberlin	Brooklyn	O. F. Tuxel	Roseburg
P. E. Prettyman	Portland	F. K. Scanlon	Portland
COAST DIVISION			
Engineers	Address	Firemen	Address
C. A. Miller	San Francisco	J. J. Pospich	San Francisco
J. A. Wells	San Francisco	J. M. Bair	San Francisco
R. L. Colburn	San Francisco	M. M. Roche	San Luis Obispo
E. E. Reynolds	San Francisco	M. H. Culy	San Francisco
A. L. Keller	San Jose	E. W. West	San Francisco
STOCKTON DIVISION			
J. C. Gualco	Tracy	E. S. Johnson	Tracy
J. O'Leary	Fresno	A. Cassarotto	Merced
C. Barnum	Oakland	A. Williams	Oakland
E. R. Saulpaugh	Fresno	A. R. Turner	Tracy
W. F. Stone	Stockton	F. A. Thompson	Tracy
SAN JOAQUIN DIVISION			
W. H. Leach	Bakersfield	F. C. Todd	Bakersfield
W. F. Thorne	Fresno	H. A. Olson	Fresno
W. K. Frye	Bakersfield	H. P. Lawrence	Bakersfield
C. D. Bigelow	Fresno	M. C. Cooley	Bakersfield
J. J. Callahan	Fresno	O. M. Crain	Fresno
LOS ANGELES DIVISION			
L. K. Sweet	Los Angeles	G. A. Andrews	Los Angeles
J. J. Hove	Los Angeles	W. J. Manning	Los Angeles
W. A. Millsap	Los Angeles	F. A. Baldwin	Los Angeles
D. M. Poole	Los Angeles	T. V. Vade	Los Angeles
W. H. Morrel	Los Angeles	G. D. Whitte	Los Angeles
TUCSON DIVISION			
H. C. Kroeger	Tucson	C. A. Meek	Tucson
J. Davidson	Phoenix	T. R. Young	Tucson
F. N. Craver	El Paso	J. C. Klingback	Tucson
F. Deane	Tucson	C. N. Ashley	El Paso
A. F. Beyer	Tucson	J. Steeter	El Paso

Impressions of an Australian Railroader

He Comments On 'Let's Go' Spirit on Southern Pacific and Tells of Train Operation Problems Across the Water

By N. J. CANNY

Outdoor Superintendent, Victorian Railways.

IT has been our privilege during the past four months to investigate on behalf of the Victorian Railways Department of Australia various phases of railroading in the United States, and for about two months we and other representatives of our Department and a Stores Officer of the New South Wales Railways who accompanied us made the Southern Pacific Company's operations the main object of our studies.

During that time we had the pleasure of coming in contact with many leading officials and members of the staff, and to those who were so kind to us, and perhaps to other readers of the Bulletin, whom we were not fortunate enough to meet, it may be of interest if we furnish some particulars of Australian railways and general impressions of our visit.

Different conditions are met with in Australia from those which are encountered on American railroads, and consequently an Australian railroad man requires some little time to gather in the immensity of a system of the importance of the Southern Pacific.

No Uniform Gauge

This will be the more readily understood when it is appreciated that in Australia the railways, which are Government owned, are not uniform gauge, and consequently the traffic in each State is mainly Intra-State in character. The extent of the various systems and their respective gauges, as at 30th June, 1920, were as under:

	Feet.
State	4 ft. 6 in.
Victoria	4,214 5.3
New S. Wales	5,015 4.8½
Queensland	5,685 3.6
S. Australia	2,333 3.6
West Australia	3,530 3.6
Tasmania	628 3.6

While the Commonwealth has a line of 1,051 miles in length of 4 feet 8½ inches gauge stretching across the southern portion of Australia and connecting the States of South and West Australia, thus giving direct rail connection as between the whole of the Capitals of the States on the mainland.

There are other lines under Federal control of

3 feet 6 inches and 4 feet 8½ inches gauge which bring the total mileage of railways in Australia to about 25,000 at the present day. The question of unifying the gauges is now under earnest consideration.

The correlation of the various railroad systems of America has certainly introduced many problems in connection with the interchange of rolling stock and intricate accounting work as well as with the actual handling of the traffic, and the facility which marks the control of the car movements and the settlement of accounts as between the various companies is certainly impressive.

On the Southern Pacific

On the Southern Pacific, the manner in which the passenger and freight services are conducted reflects credit upon all concerned, and it was extremely interesting to us to observe the loyal and prominent part which the train crews play in the movement of the trains under the despatching system.

In Victoria, most of the lines are equipped with electric staff or staff and ticket, and under both of these methods of working the Station-Masters become the train despatchers, and much is dependent upon them for the punctuality of trains, whereas you have the "Let's Go" spirit well developed, and it is refreshing to see

so many on tip-toes to land the trains at their destinations on time.

One of the special objects of our visit was to investigate the use of automatic signals on single lines, and we were agreeably surprised to realize the extent to which the lines of the Southern Pacific are equipped with such signals, which undoubtedly tend towards the safe and expeditious movement of the traffic.

The Stores Supply train and the operations of the Stores Division generally were given our special attention for some weeks, and we do not hesitate to say that your company has something to be proud of in the efficient manner in which the control and delivery of the stores and supplies are attended to.

Capacity of Freight Cars

Another feature of considerable interest was the capacity of the freight cars and the length of the freight trains. Density of traffic and long hauls apparently favor the Southern Pacific system, and the volume of freight that is moved in a given time is a revelation to an Australian railroader. In order to appreciate it all, one has actually to see the operations conducted as has been our privilege.

In Australia, comparatively small freight cars are used, the average capacity of the Victorian cars, or trucks as they are known there, being about 13 tons.

Owing to the break of gauges, the shorter hauls involved, and the seasonal nature of the greater volume of the freight business, they are more suited for the traffic and considered to be more economical than the larger cars such as are used in America would be.

The enthusiasm, general ability, and co-operative efforts of the respective Divisional Superintendents and their staffs on the Southern Pacific are unquestionably important factors in the achievement of the splendid results which the being obtained on the system, but on other sides we found about ordinariness of effort, courtesy and a mutual understanding.

We will always look back with the greatest pleasure on our visit to America, and particularly our meeting with the of-

Marshal Foch Writes Thanks for Service on S. P. Lines

The following letter was addressed to Wm. Sproule, President of the Southern Pacific Company, by Marshal Ferdinand Foch at the conclusion of his recent tour of the United States:

Mr. President:

During the course of my trip in the United States, I had occasion to travel on the lines over which you preside.

I was the object of a great deal of attention on the part of your personnel and everything was done to facilitate my movements.

I would very much appreciate it if you would convey my gratitude to those concerned and I hope, Mr. Sproule, that you will accept my sincere thanks as an expression of my appreciation.

(Signed) F. Foch

ficers and men of the Southern Pacific, whom we had the honor of consulting. The cheerfulness and ability with which information was supplied us made us feel proud of the opportunity we had to meet our brother railroaders on the other side of the Pacific. To your President (Mr. Sproule) and your Vice-President (Mr. Shoup), especially we owe an everlasting debt of gratitude for their unstinted kindness to us, and we need scarcely say that this expression of appreciation of the consideration shown us will be heartily shared in by the Victorian Railways Commissioners.

SOUTHERN PACIFIC LEADER IN FUEL OIL SAVING

During the month of October, 1921 only four roads in the entire country show a lower rate of fuel consumption per car mile, passenger service, than the Southern Pacific Lines. Only eight roads show a lower rate of consumption per 1000 Gross Ton Miles, freight service. In every case the roads with the lower rate of consumption show a higher average train load. Therefore, considering tonnage handled, these lines were really second to none in point of fuel efficiency.

The margin by which those lines lead in rate of consumption is so small that it should not be difficult to go to the top of the list. For example, the P. & L. E., the leading road in freight service for October, shows a rate of consumption of 85 pounds coal per 1000 Gross Ton Miles with an average train load of 2374 tons, while the Southern Pacific Lines show a rate of 126 pounds per 1000 Gross Ton Miles with an average train load of 1221 tons. In passenger service, the Southern Pacific-Pacific System leads with a rate of 11.0 pounds per car mile with an average of 82 cars per train, while the Southern Pacific in Texas and Louisiana shows a rate of 12.0 pounds per car mile with an average of only 6.4 cars per train.

A little more effort on the part of each employee in every department to save fuel should put us nearer the top. An increase in average train load will carry us over the top. Let us aim to lead the entire country in 1922.—Atlantic System Bulletin.

SHREVEPORT BALLASTING IS CONTINUING RAPIDLY

The work of placing the new burnt gumbo ballast is progressing with reasonable speed on the main line Shreveport division, east of Humble. Some eight miles of track have been ballasted to standard section, and not only makes a fine appearing track, but its smooth riding qualities has given the patrons of the H. E. & W. T. an appreciation of what the division will be when present plans of management are consummated.—Atlantic System Bulletin.

Fireman Urges Jitney Taxation

A. M. Fisk Writes Letter to Pacific Grove Organization Asking Patronage of S. P.

I WOULD like to call your attention to what the railroads are up against and what it means to Pacific Grove for the Southern Pacific Company to maintain its terminal here and why you should patronize them," said A. M. Fisk, Coast Division fireman, in a letter, he recently addressed to the secretary and members of the Chamber of Commerce at Pacific Grove.

Mr. Fisk showed how the highways, built at great expense by the State of California with money collected in taxes from the public, including the railroads, are being broken up through the operation of privately owned automobile truck and bus lines. He emphasized the necessity for an adequate state tax upon the highway carrier.

Touching upon the local situation at Pacific Grove, he continued:

Keep Money at Home

"The companies handling freight and passengers out of Pacific Grove via automobile do not maintain stations in our city for the convenience of their patrons but use our public streets for this purpose. They do not employ anyone who resides in Pacific Grove, neither do they have any payroll that could in any way compare with that of the Southern Pacific Company; in fact, they have no payroll at all in Pacific Grove. They spend but little if any money here unless it should happen to be for gasoline to enable them to get out of town. If all the business here was handled by rail it would enable our local truck drivers and taximen to make more hauls and keep the money in Pacific Grove. Do the auto busses mean more to Pacific Grove than the advertising the Southern Pacific is giving our community? If not, then the solution is to patronize the railroad. The local merchants are inconsistent in their argument against us patronizing mail order houses when they themselves patronize the truck and jitney instead of a permanent institution in the shape of the railroad.

"Southern Pacific service to Pacific Grove is exceptionally good. In view of the fact that we are located on a branch line. We want to see our present service continued and we know it will not be without every one's co-operation. We hope the merchants of Pacific Grove will work hand in hand with us in an effort to retain what we now have. Our service. Do you know that if one train were discontinued out of Pacific Grove, that twelve families would have to move from your city? There

are forty-six railroad men working out of Pacific Grove, most of these men are married and their families reside in Pacific Grove; many of them own property here and are contributing in the form of taxes to maintain an unfair competitor to the railroad upon which they are employed.

S. P. Payroll Cited

"The payroll for Southern Pacific employees working out of Pacific Grove is approximately \$9,000 per month (this does not include the section gang, some of whom live in Monterey and others in Pacific Grove); practically all of this money is distributed among local merchants for the necessities of life in this community. The Pacific Grove Chamber of Commerce stands for the advancement and enlargement of Pacific Grove and so does the Southern Pacific Company because they have money invested here. Do any of the auto busses or trucks running in here care about Pacific Grove's advancement? No! Because they have no money invested here.

"In conclusion I would like to say to the local merchants that we know who is having their freight shipped in by truck and that our \$9,000 per month payroll should not be lost sight of; in other words, 'Don't bite the hand that's feeding you.'

"I just put this matter before you in a fair way, hoping that the fair-minded members of the Pacific Grove Chamber of Commerce might take some action on my suggestion, as it not only means a great deal to Pacific Grove, but to the entire state of California. The railroads are the life blood of California and are getting 'the skimmed milk' in return for their service."

S. P. HANDLES BIG CROWDS TO FOOTBALL GAME

Crowds of northern California football fans were handled to the East Coast by the Southern Pacific Company at Pasadena, January 2, by the Southern Pacific Company in a satisfactory manner. The Company had adequate accommodations for the throngs who made the trip.

On the going trip the traffic was distributed over three or four days and was handled in extra equipment added to the regular trains.

Returning it was necessary to operate second sections of the "Owl" and the "Lark" from Los Angeles January 2, and a second section of the "Owl" on January 3.

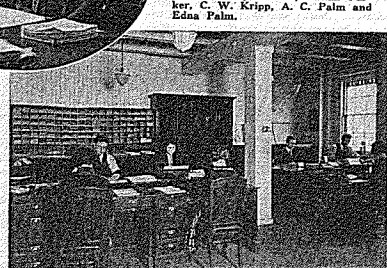
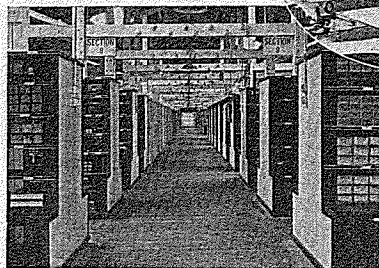
First Unit of Immense Stores Plant Occupied



The new warehouse of the Stores Department at Sacramento is shown above and the accompanying interior views show the carefulness of detail that characterize this plant. Center inset, E. Hart, District Storekeeper, Sacramento.



Below, office employees, Store No. 1, left to right: Harriet Desmond, C. Grolla, Fanny Schilas, Lillian Parker, C. W. Kripp, A. C. Palm and Edna Palm.



By E. HARTY District Storekeeper, Sacramento

THE Stores Department at Sacramento has just occupied two new buildings which comprise the first unit of what is to be one of the largest facilities devoted to storage and distribution of railroad materials in the country.

These consist of a main store building of two floors, 500 feet long, with platforms making it 700 feet long in all, and a fireproof oil house equipped with all modern handling facilities.

The first floor of the main building serves as a warehouse where materials are stored in original package lots ready for shipment to other stores, thus saving the cost of packing. The second floor contains material stored in racks for delivery to local shops, for equipping the three supply trains operating from this store and for shipment to smaller stores. In all there are 82 racks, or nearly five miles of shelving.

Like Department Store

Materials are divided in sections, or departments, similar to the arrangement of modern department stores. These sections are in charge of smaller quantities, while power pumps, tion stockmen, each one attending to

ordering, receiving, storing and issuing the materials coming under his jurisdiction.

Every item of material in the store must be counted once each month. This count must be accurate for it is upon this that the purchases for that month are made. Considering that these purchases may run as high as a million dollars monthly, the necessity of accurate count can be easily recognized.

To facilitate this monthly inventory, various methods are followed to secure a positively accurate inventory in the least possible time. Large items of materials are piled in unit piles; sheet iron in piles has sheets numbered successively from bottom to top so that the top sheet always shows the number on hand; small materials on shelves are arranged in trays, a certain number in each tray and these stacked one upon another. Each tray shows the number of units in it and all others below it.

The oil house is a fireproof structure of concrete and steel. In the basement are the supply tanks of oil of various thousand gallons of oil of various kinds. Self-measuring and register-

ing hand pumps handle the issues in which automatically measure and deliver amounts ranging from a barrel to several thousand gallons, handle the oils that are distributed to the line in supply trains.

Aids Other Departments

The vast manufacturing facilities of the Company are located here, producing bar iron and steel; brass, iron and steel castings; cast iron car wheels, tie plates, and many other materials, practically all of which amounts to over four million dollars yearly.

To supply these industries, the Stores Department operates the largest scrap assembling and sorting dock on the system. Here the accumulation of scrap from practically the entire railroad is sorted. Materials which can be placed in condition for further service are repaired and returned to the Store. No item of material that can be repaired is overlooked; even old oil cans and used track spikes are repaired and returned to active service. That which is scrap is sorted to suit the necessities of the various manufacturing plants, or for sale.

The activities of the Department, in

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a large measure, are devoted to service to other branches of the railroad. In order to keep closely in touch with the needs of these operating branches, the Stores, wherever possible, deliver materials and supplies direct to the workmen.

At the shops with motor trucks, cranes and cars, they deliver direct to the mechanics all materials ranging from huge locomotive cylinders down to ice for their drinking water.

Monthly Supply Trains

These activities extend beyond the immediate shops, as means are provided for direct delivery to the user on the line of road through medium of the Supply Trains.

From Sacramento each month three large supply trains, carrying materials of every kind, including oils, lumber, etc., move east to Ogden, north to Portland and south as far as Santa Barbara, delivering these direct to the consumer, at the same time affording means of inspection and a personal knowledge of requirements by Division Officials. This feature of personal contact of Supply Department and consumer makes for economy and efficiency.

In addition to the delivery of materials, these trains gather the worn tools and other materials to be repaired and collect the waste material for the operation of the manufacturing industries.

The outstanding feature of the delivery system is that it provides for regulation of quantities of materials stored on the line, reducing this to what is actually required to carry on the work, resulting in important economies, and making it possible to concentrate materials at central depots.

The proper care and economical handling of materials at the central depots, or stores, together with the distribution facilities mentioned, establish control over the materials of the Company. To many the importance of this item in the expenses of a railroad is not apparent.

Handled Like Cash

The illustrations indicate the attention that is given the care of materials. Stored in open racks in full view; marked plainly with the proper description of every item; the quantity on hand showing at all times. This means that the section stockmen are in touch with each item of the many thousand at all times, and that the million dollars stored in this building is as carefully taken care of as if it were in cash.

While the main building is only a part of the storage facilities within the plant at Sacramento, they give an idea of the extent and nature of the Stores operation. To these buildings it is proposed to add a fireproof magazine for storing inflammable and explosive materials, which on account of their nature, constitute a fire hazard to the shop buildings and the equipment in

them; also a fireproof paint store and mixing room which will contain all the modern equipment to be found in a plant of this kind.

Around these central buildings will be grouped the heavier materials, such as locomotive tires, wheels, castings, lumber, etc., forming a store handling a business ranging from twelve to fifteen million dollars yearly, with a stock averaging four million dollars in value, and where four thousand and carloads of material are received and a like number shipped each year.

STORM EMPHASIZES SUBSIDY GIVEN JITNEY LINES

That the recent rainstorm has given a direct illustration of one of the direct subsidies granted to bus operators using the public highway is the contention in a statement issued by D. W. Pontius, Vice President and General Manager of the Pacific Electric, says the Los Angeles Herald.

"I have just returned from a sixty mile trip over our San Bernardino line, which has been kept in service despite the tremendous handicap of the record rainfall. On this one line alone, which a fair standard for the comparison of the balance of our lines, we have had more than one hundred men employed and thousands of dollars worth of equipment used in checking flood waters and keeping them under control. At other points along our line where the State and County highways parallel it, I was able to look out the car window and see large forces of men, upon the payroll of the State or County, engaged in the work of repairing highways, while the bus men sat idly by awaiting their re-opening."

ROBINSON NEW ENGINEER OF EAST BAY DIVISION

Announcement of the appointment of P. T. Robinson as Division Engineer of the Southern Pacific Company's East Bay Electric Division, effective January 1, 1922, has been by Superintendent J. C. McPherson.

Mr. Robinson began his railroad career in 1900 as rodman-instrumentman in the engineering department of the Union Pacific Railroad. In 1908 he entered the service of the Southern Pacific Company as assistant Engineer, Sacramento Division. In September 1919 he was promoted to Assistant Division Engineer of the Western Division.

J. P. Edwards, formerly Assistant Division Engineer of the Salt Lake Division, succeeds Mr. Robinson as Assistant Division Engineer of the Western Division.

The Record

Howell: "Last night was the hottest night in the year."

Powell: "Not for me; the hottest night for me was when my wife discovered that my pay had been raised and I hadn't told her of it."—New York Sun.

HEADS EAST BAY LINES



—Captain J. C. McPherson

J. C. McPHERSON, superintendent of the Southern Pacific Electric Lines in Oakland, Alameda and Berkeley from 1913 to 1918 and during the war a captain of engineers overseas, returned January 1, 1922, to his former position after several years with the Pacific Electric at Los Angeles.

In resuming direction of the Company's electric lines in Oakland, Alameda and Berkeley, Captain McPherson took the title of Superintendent of the East Bay Electric Division. He was transferred to this position from Los Angeles where he had been assistant general superintendent for the Pacific Electric Railway, since he returned from the war in 1919.

Captain McPherson was born in Ireland, received a grammar and high school education and came to this country when 16 years old. He entered railroad service with the Santa Fe at Raton, N. M. serving in the machine shops and later as fireman, locomotive engineer and roundhouse foreman.

He came to California in 1895 and started as motorman on the Los Angeles and Pasadena Railway, the first link in the great Pacific Electric System of today. He advanced as that system developed, being Superintendent of the Northern Division, Pasadena, in 1913, when he was made Superintendent of the Southern Pacific electric lines in Oakland, Alameda and Berkeley.

Captain McPherson is well known to business men and residents of the Bay district and to railroad men throughout the West.

Where Will They Get the Money?

If I. C. C. Denies Railroads Right to Make Transcontinental Rates Meeting Water Competition, How Can They Pay Their Bills?

By G. W. LUCE,
Freight Traffic Manager

THERE is now before the Interstate Commerce Commission an application, filed by the transcontinental railroads, asking for permission to establish from Atlantic to Pacific ports lower rates than at the same time are in effect at intermediate points, which lower rates are necessary to enable carriers to meet water competition between the ports.

Southern Pacific Lines have also made application for permission to establish, eastbound, via their Sunset Gulf route from Pacific ports to Atlantic ports, lower rates than apply from and to intermediate points. The rates desired to be published by the Southern Pacific are necessary to enable that line to fairly meet water competition from the Pacific Coast to the Atlantic Coast.

Much has been said by the press of interior cities regarding these cases (commonly referred to as the Long and Short Haul Question), giving the impression that a great disaster would befall such communities if carriers' application is granted.

Statement has been made by shippers that interior towns and cities will be compelled to pay higher freight rates than terminal points.

If the Interstate Commerce Commission grants the application of carriers.

This statement, taken by itself, may be true, but the freight rates which interior communities will be required to pay will be higher than they are today or ever before, if the carriers are denied the privilege of making rates fairly meeting Canal rates. If the water service between the Atlantic seaboard and the Pacific coast continues to increase and the transcontinental railroads are prohibited from meeting the water rates, unless they make the same, or lower, rates to interior points (which they cannot afford to do unless water rates are sufficiently high) the traffic will move by water, and if the railroads must forego the revenue on that traffic, it is quite evident they must increase the rates sufficiently on the only remaining traffic, which is that of the interior, to earn the necessary money to pay their bills.

Two Pertinent Questions

Are the railroads to be refused permission to so adjust their rates as will enable them to compete with the water carriers, and be limited to interior traffic that can only be handled by rail, and to increase their rates on such traffic so that their earnings will be sufficient for fixed charges, operating expenses, taxes, and a reasonable profit?

Also, are the railroads to be restrained from making necessary rates on United States manufactured goods from interior points to the Pacific coast cities to meet competition of foreign made goods reaching those cities by water?

It is not my view that the railroads should be permitted to make rates that will force the water lines out of business, for I do not believe in destructive competition, but do believe in fair and just competition, both as to rates and service, properly regulated, and therefore suggest that the railroads be permitted to fairly meet the water line rates and enjoy a share of the business, utilizing their facilities to the fullest extent; the Interstate Commerce Commission to say to what extent the railroads may go towards meeting water competitive rates without affecting intermediate rates, which

must fix the interior point to which they can afford to handle the traffic from points of origin at rates based on the water rates, plus the rail rate back to such interior point. Further, if rates on traffic from points of origin to destinations nearer the Pacific port than such fixed point must be the same, or higher, the traffic would then be forced to the water lines.

Would Harm Interior

It is misleading to say that refusal on the part of the Commission to grant carriers permission to make lower port to port rates will be helpful to intermediate points will be helpful to the interior. In my judgment it will not, but, on the contrary, will be harmful.

What difference does it make to the merchant at intermediate points whether his freight is moved via rail direct, or via water and rail route, so long as the through charge is about the same by both routes? It is to his advantage to have at his command the use of either route. He would have the benefit of daily service by rail, and not be dependent wholly upon the once a week sailing days of the water routes. Can the privilege of having two kinds of service (at about the same charge) instead of being confined exclusively to the water route, be harmful to the interior? Is it not also helpful to the interior to have a daily, dependable, direct rail service at rates fairly measured by the water rates?

Viewing the situation from the standpoint of moving traffic by rail through interior points to terminals, or coast cities, it is helpful to the interior for the more trains handling traffic through the interior to the water terminals, more trainmen are employed and more material and supplies are used, which is always beneficial to both interior and terminals.

Again, it is beneficial or harmful to the interior as that service is increased or diminished, depending on whether or not the railroads are compelled to retire from handling traffic to water terminals. As the traffic must reach the terminals, the railroads not being can it possibly make to the interior towns and cities if a share of it moves

Lower Port to Port Rates Are Not Prejudicial to Interior

It is not my view that the railroads should be permitted to make rates that will force the water lines out of business, for I do not believe in destructive competition, but do believe in fair and just competition, both as to rates and service, properly regulated, and therefore suggest that the railroads be permitted to fairly meet the water line rates and enjoy a share of the business, utilizing their facilities to the fullest extent; the Interstate Commerce Commission to say to what extent the railroads may go towards meeting water competitive rates without affecting intermediate rates, which must at all times be reasonable.

It is misleading to say that refusal on the part of the Commission to grant carriers permission to make lower port to port rates than apply to intermediate points will be helpful to the interior. In my judgment it will not, but, on the contrary, will be harmful.

must at all times be reasonable.

If the traffic is forced to move by water, and then trans-shipped to interior points, the railroads not being permitted to fairly meet water competition, it follows that the railroads

roads are compelled to retire from handling traffic to water terminals.

As the traffic must reach the terminals, the railroads not being can it possibly make to the interior towns and cities if a share of it moves

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by rail instead of it all moving by water? Further, it seems to me that interior towns and cities would prefer to have the rail lines carry the traffic because it would be helpful in the upbuilding of the interior.

Are not the terminals, or coast cities, entitled to the use of the rail lines which serve them? Are they to be denied the choice of either rail or water service? Should they be compelled to use the water lines and denied the use of the rail lines by the refusal of the Interstate Commerce Commission to permit an adjustment of rates by rail, fairly competing with the water lines in both rates and service?

It seems to me that all manufacturing industries, as well as all jobs, both at interior and coast cities, if they take a broad, business "good-for-all" view, should be favorable to the granting of carriers' application referred to above.

Measured by test, it is my opinion that the application of carriers seeking permission to meet by rail the rates of Canal lines, if granted, would be just and fair to all interests, and will be helpful to the public both of the interior and the Coast cities. If the application is denied, the interior cities will suffer in equal measure with the rail carriers.

Highway Competition

There is another matter which I feel should be brought to your attention because everybody, it seems to me, is interested, not only the shippers and the railroads, but the public in general, and that is the disastrous effect that freight motor trucks and passenger auto buses are having on the revenue of all. The rail carriers are affected the greatest on account of the ability of the motor trucks to unfairly compete and handle traffic on the highways paralleling the railroads, which highways were built by the public (which includes rail carriers) through taxation and without any cost to the motor trucks. Thus the rail carriers, by loss of revenue and taxation, contribute to the maintenance of these motor trucks. The public contributes to them by greater taxation for the same purpose. Their track, so to speak, and the maintenance of their track is paid by the public and the rail carriers, the motor trucks paying nothing except a small license fee for a facility to earn their revenue and privilege of destroying the highways, which were built primarily for pleasure or privately owned automobiles and not for commercial purposes.

I do not claim that the motor trucks have no rights and should not use these roads, but I believe that they should be made to pay a fair tax to compensate the public for the destruction of the highways.

The rail carriers are suffering in large amount by loss of revenue, especially short haul revenue, because of the severe competition of the motor trucks, which should not be permitted to continue.

I call this to mind, which all have undoubtedly, more or less thought of,

Employees Boost for Business at Colton

Southern Pacific employees at Colton have formed a boosters club whose object is to increase the Company's business. H. R. Pierce, a conductor, has been elected chairman of the Executive Committee. Other members of the committee are: W. H. Ham, A. R. Hosegood, E. F. Price, G. C. Rick and L. P. Straw.

The object in effecting the organization is seen in the fact that the greater the Company's business the more men will be employed and vice versa. In other words if the business decreases many men will be forced to look for work in other sections of the country; if it increases more employment will result.

A committee has been formed to draft a statement to be presented to Colton business men calling their attention to the benefit derived from the railroad and asking them to reciprocate by swinging their business to the railroad.

OREGON MAYOR DRIVES AUTO OF LOCOMOTIVE STYLE

Mayor L. P. Eastman, of Silverton, Oregon, is no slave to convention; at least not in the way he makes his official calls, as evidenced by the fact that he recently made an official visit to Mayor Halvorsen, of Salem, driving into town in what appeared to be a miniature Southern Pacific locomotive. Eastman had constructed the locomotive model on an automobile chassis in standard style with cab built over the wheels and enclosed in case of rainy weather.

With bell ringing and smoke coming from the smokestack the novelty attracted much attention.

The Real Question

"We had not been hunting long when there lay a rabbit dead at my feet."

"What had it died of?"—Sondags Nisse, Stockholm.

for the purpose of acquainting you with this menace to the rail and inland water lines, whose financial situation is in a precarious condition. The rail and inland water carriers need all the help and support possible. There has been a great clamor for reduction of rates, and some reductions have been made and others will be, but the carriers cannot go very far in making these reductions if the motor trucks continue to take the carriers' revenue by using the highway without any compensation for its destruction and permission to use it for commercial gain.

NEW YORK EMPLOYEES HOLD ANOTHER CELEBRATION

The second celebration of the Southern Pacific "Boosters" was held December 13 when 100 employees of the New York office enjoyed a dinner, dance and entertainment furnished by talented members of the organization. A feature of the program was a solo by "Jack" O'Connor of the Passenger Department.

The "Boosters" scheduled another celebration for the Christmas holidays, a masquerade ball. The entertainment committee of the organization includes:

The Misses Madeline Ruh, Florence Reinert, Doris Geraghty, Margaret Huber, Agnes Carmody and Ethel Eastman; the Messrs. R. E. Bassett, E. Beebe, E. A. Swenson, E. H. McCrum, J. S. Osborne and L. J. Walsh. W. J. Hanrahan is chairman and J. J. O'Connor, secretary-treasurer.

HOW CONDUCTOR TACTFULLY SHOWED PATRON ERROR

An instance where tact and quickness in meeting a situation prevented a dissatisfied patron is reported by John A. Gill, Tariff Inspector. The incident occurred on train 187 from San Jose to Niles. A woman presented a ticket reading San Jose to Stockton to Conductor H. E. Wamsley and asked what was the correct fare. He told her \$2.94 whereupon she replied that she had been charged \$3.94 and intended to report the matter. Asked if she was sure she had been overcharged she produced the change from a five dollar bill, two silver dollars, a "nickel" and one cent. Seeing that the woman was in error Conductor Wamsley took the money and said:

"You claim to have paid \$3.94 for the ticket. Here is six cents which makes \$4.00 and here is one dollar which makes \$5.00. How about the extra dollar?"

The woman was nonplussed for a moment and so he added:

"You were only charged the right amount. Here is your correct change," and he gave her the extra dollar.

Mr. Gill says that if patrons would carefully count their change such complaints would be eliminated. He praised Mr. Wamsley's diplomacy.

ATLANTIC SYSTEM FREIGHT MAN "STEPS ALONG"

S. G. Reed, assistant general freight agent, was recently appointed assistant to traffic manager, with headquarters Houston. Mr. Reed was formerly located at Dallas in charge of that territory, but on the return of the Lines was removed to Houston and placed in charge of industrial locations and given other duties.—Atlantic System Bulletin.

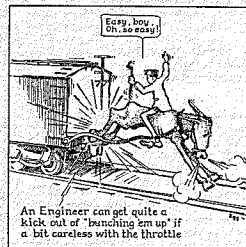
CONCERNING TOO MUCH NERVE

By ORIAN C. SHOWN

Engineer, San Joaquin Division

Compiled by C. L. EGGLISTON, Dringhamian

THE WRITER is at loss as to just how to designate this little article. No doubt it might be considered, as a talk along the Safety First Line. However, we have not exactly that definition in mind. Our intention is to put forth a few thoughts, gained from observation and contact with actual conditions. It would seem to the writer that the actual, not the theoretical condition, is



the thing with which we have to deal. It is not our intention, to place ourself in contravention, with the 100% idea, but we figure that the conditions as we meet them are in a great many instances 75% or possibly 50% and it is up to us to supply the 25 or 50% by so suiting our actions to the condition met that we may bring about a perfect solution of the problem.

We will take the conditions found in road service, as that is the branch with which the writer is most familiar. There are many times we may begin a trip with a 100% condition and before going five miles encounter obstacles that lower the condition 50%. It will then be up to us to supply the missing 50%. Safety First is not alone enough. We believe in extreme care all the time. In the exercise of extreme care we must have the feeling of perfect safety in the action contemplated or taken.

Make Haste Slowly

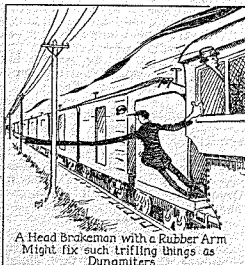
There seems to be and has been for some time, a condition of hurry a good deal like the boy hurrying to school along a slippery road, two steps back and one ahead. He got there after a while but he was making haste slowly, where, if he had taken it a bit easier and picked his steps, he would have made better time and with less effort. So it seems to the writer, owing a good deal to the trend of times, we should watch our step more closely, use extreme care in our actions, and we will arrive at the end of

the trip about as soon and probably with less expenditure of energy.

We may say there is a certain finesse about some persons that seems to enable them, to accomplish with ease tasks that would require a great effort from others. It is not that the more fortunate persons are endowed with any greater degree of knowledge or experience in the matter undertaken, but we do not all have that perfect poise and calmness that is natural with some.

However, that is the thing we should cultivate calmness, serenity. Let not our nerves run away with our head. If there is action to be taken, stop, think then act. Take plenty of time. Let's do it right as we go along and avoid regrets.

Nerve is a great thing, but too much of it at the wrong time is very bad. Understand, the writer is not claiming to be a paragon. We are simply trying in our humble way to express a few thoughts that come to us as we pass along. We have seen the fellow with lots of nerve depending entirely upon said nerve, and it always seemed to us that he was simply making a big noise to bolster himself. We may liken the nerves to a band of rubber. We may at times stretch them with a long steady pull and land just where we wish. Again, if we cause too severe a strain in taking our jump, we may be jerked backwards and find that we can not gain our foothold as before. Therefore, let us in our duties put forth every effort but maintain the equanimity, or perfect poise, that will allow us to go about our work with that extreme care, enabling us to accomplish more and with a greater degree of safety.



Why dash damn out of a siding, where we may be safely ensconced, and take a flying leap to the next switch beyond only to find that we are a couple of minutes shy, and then

after holding the Owl, the Lark, or whichever it may be, to say nothing of jerking out a lung or two, or upsetting Capy in his Crumby, and spilling the stew for Fusce Bill? We then feel like getting off and letting the Tallow Foot take them in.

Don't Cause Worry

Worry? Oh, no, we never worry. But we get a kind of sinking feeling sort of a goneness, when we try to figure out a plan of defense? Easy, boy; oh, so easy! Take 'em out slow, watch your step, kind of pick along, like the Dainty Miss. Crossing the street in the mud. We were lately given a demonstration of slack action by one of our officials, and we truly believe it is a great subject and should be given much thought. We would be so tickled if we could just reach by and grab a handful of that throttle, pull out a big bunch of said slack, and move them all so easy that the Capy would think it was little Willie Westinghouse on the head end, instead of Always Trying. Then again, if we could just crawl back through that train pipe and grab that dynamite just as it got ready to jump in, we would wring its neck. However, let's bunch 'em up easy, pull 'em out slow, use extreme care in all our movements and we will sleep better nights.

WESTERN DIVISION MEN ARE PRAISED FOR COURTESY

The following letter from a Berkeley commuter to T. F. Rowlands, Superintendent of the Western Division, shows that courtesy and consideration for patrons is appreciated. The letter reads in part:

"As I send out my wishes for the New Year I cannot pass by the men who have made the old year such a safe and comfortable one in which to live. I mean the Captains and other employees on the ferry-boats and the brakemen and conductors on the locals. I'd like personally to thank each one of these gentlemen, but I do not even know their names. I decided to ask their Superintendent to extend greetings, a happy and prosperous year to them all for me."

"My husband and I daily commute on the Ellsworth line, and it is indeed a pleasure to travel thereon because the conductors are such courteous, helpful men. Two stand out especially. One of them is Mr. T. Matchette and I've missed him the last month. The other is Mr. F. J. Silva, who has been particularly kind to me and on so many occasions I have noticed his attention and courtesy to women, especially the elder ones."

Cordially yours,

(Signed) Virginia Phillips
3044 Deakin St., Berkeley

What Number

Excited lady, at the telephone: "I want my husband, please, at once." Telephone girl from the exchange: "What number, please?" Excited lady, snappishly: "How many do you think I've got, pray?"—Exchange.

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Southern Pacific Bulletin

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K. C. INGRAM, Editor

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IN recording announcements of promotions in various departments of the Company recently the Bulletin has had occasion to print brief sketches of the men who have "gone up." The sketches reveal one fact common to all these men: They began their careers with the Southern Pacific in humble capacities. At one time they were office boys, call boys, clerks, cleaners, baggage men, section men, telegraphers, brakemen or occupied other positions in the ranks. "You can't keep a good man down." Certainly that truth is exemplified in the careers of leading Southern Pacific men. By continuous application over a period of years they forced their way up.

It is an enheartening thing to know how promotion is won in the Southern Pacific organization.

YOU have the 'Let's go' spirit well developed," writes one of the Australian railroad officers, who recently completed an investigation of Southern Pacific Lines, in an article contributed to this number of the Bulletin.

No finer thing could be said, no higher praise could be given Southern Pacific employees.

"Let's go!" It is typically American. A careless sounding phrase, but it hints of indomitable courage and gives a flash of the urge and enthusiasm that drive straight ahead in spite of fire and high water.

YOU will go ahead quicker if you concentrate your whole energy on DOING things."

"I say to you: Learn to Think." Above are two sayings of Marshal Ferdinand Foch of France, generalissimo of the Allied Armies during the World War, who traveled over our lines during his recent visit to the United States. Each of these sayings is in itself a sermon on success and taken together they comprise a complete philosophy of achievement.

Read over slowly the following epigrams from the lectures, authorized interviews and dispatches of this military genius. Pause after each and build your own thought structure on the fundamental truth he lays down. You will find it interesting and helpful.

THE BULLETIN

The Ferry Boat

I'm just an S. P. Ferry-Boat but famous everywhere
For beauty and for service that I give;
I ply across the water of a harbor just as rare,
And vicinity—no better place to live!

Now Pullman, Box Car, Locomotive each has had his say—
The "Bulletin" for print has deemed this fit—
"Comparisons are odious," but listen to my lay
For I too in the service do my bit.

I have no rail to guide me in the darkness or in fog,
No semaphore to signal "All is clear."
I'm guided by my Captain who is governed by his log
His compass and his clock, from pier to pier.

The continental passenger when freed from Pullman Car
Steps on my deck and breathes the pure, salt air.
He marvels at the beauty of the view, from near and far,
The sea gulls, Golden Gate and City fair.

Just ask the true commuter why he travels every day,
He'll tell you that the boat-ride's the incentive,
The ozone that he gathers while crossing o'er the Bay
Is certainly for all ills a preventive.

I hear "It's a sad story, mates" they say my day are numbered
I soon shall have to go "across the ridge."
But that don't worry me, by fear I'm not encumbered
For we all may die before there'll be a bridge.

So Pullman, Box Car, Locomotive, each may have his day
(In S. P. transportation they must meet)
Still in San Francisco Harbor the Ferry Boat holds sway
And without my aid the System's incomplete.

—By A. Vester,
for 36 years Captain in Southern
Pacific Ferry service.

"Above all things we must keep a firm WILL, based on confidence. 'I will'—that is easy to say. Will is useless if it does not know how to apply facts."

"You must conceive what would happen in case of defeat and in case of victory."

"At the Marne I said: 'I shall be beaten four days or five days if necessary; but I shall survive it.'"

"We were bound to win."

"My center is giving away. My right is falling back. The situation is excellent. I shall attack."

(To an officer who said, "My troops are exhausted.") "So is the enemy. Attack!"

"Victory will ALWAYS go to those who deserve her through having stronger will and higher intelligence than others."

Playing Safe

Tommie—Grandma, if I was invited out to dinner some place, should I eat pie with a fork?

Grandma—Yes, indeed, Tommie.

Tommie—You haven't got a piece of pie around the house that I could practice on, have you, grandma?—Exchange.

ATLANTIC STEAMSHIP LINES GIVE 8-DAY SERVICE

Assistant General Freight Agent Atkinson at Dallas is naturally pleased in the fact that freights from New York, via ship to Galveston are now arriving at Dallas on the morning of the eighth day, citing movement of six cars, which left New York, November 16, arriving Dallas, November 24, at 4 a. m., routed Galveston division to Houston, Shreveport division to Nacogdoches and T. & N. O. to destination.

Mr. Atkinson in discussing the service stated: "I think this is a splendid record for the divisions over which the cars moved and I wish to congratulate everybody concerned in the performance. If the pace they have set is not too strenuous and can be maintained, we will have cause to feel pleased. We of the traffic department of North Texas feel much elated that the resourcefulness of the Southern Pacific Lines has been able to overcome obstacles that we at one time thought insuperable."—Atlantic System Bulletin.

"Doesn't that mule ever kick you, Sam?" asked the officer.

"No, suh, he ain't yet," answered Mister Johnson. "But frecklelike he kicks de place where Ah recently was."—American Legion.

THE BULLETIN

Christmas Celebrated on Train

Unique Event Staged on Overland Limited by Passengers with Help of Train Crew

The following story of an unique Christmas celebration aboard the Overland Limited was written by Mrs. Martha Royle Palmer, daughter of the late Jonathan C. Royle, of the firm of attorneys, Marshall and Boyle of Salt Lake City, for many years attorneys for the Southern Pacific.

Although delayed by a cave-in at Blue Canyon, Nevada, there was not a "grouch" on the train according to J. A. M. Johnson of Honolulu, mentioned in the following story. "Among the train men and passengers there was a pervading spirit of helpfulness. Nearly everyone missed a Christmas reunion of some kind, but disappointments were forgotten while all joined in the impromptu celebration."

As the Southern Pacific train sped through the night on Christmas Eve, bearing its precious human freight—gathered from the ends of the Earth, how many home-sick hearts gazed out upon the snow clad hills—watching the towering Christmas pines which glistened with nature's fairy candles. Then came the spirit of Christmas on wings of love and swept through that train bearing a message: "Santa Claus will greet you in car 22 at 7:30." So, lonely, home-sick folk from Paris, France, Manila, Honolulu, and nearly every state in the Union, gathered together in a car which had been emptied of passengers to make room for Christmas. At one end stood an ideal Christmas tree, as though conjured into existence by a fairy's wand, loaded with toys and balloons, draped with glittering festoons, surmounted by holly wreaths.

When every seat was filled the moving spirit of the play, J. A. M. Johnson of Honolulu, greeted us at the Community Tree and said: "Tonight is dedicated to the grown-up children who must all go back and be young again and join in the spirit of fun, and good fellowship which should always bring us about the tree on every Christmas Eve. Here on a speeding train where the lovely reality had seemed an utter impossibility." But nothing is impossible when great hearts and willing hands are joined in the effort to make people happy.

Grown-Ups Celebrate

The Christmas spirit then called for Santa Claus, who in the person of Alfred H. Seal of San Francisco appeared, to be greeted by a united shout from the assembled children. After the presents had been distributed with appropriate remarks, Santa led the way with a song and dance, to be followed by a variety of stunts, stories in every dialect, including Chi-

nese, Irish, English, Scotch and Darkey-poems and songs, old and new interspersed by more serious bits of Christmas cheer and friendship. Finally all joined hands and sang "Should Auld Acquaintance Be Forgot?" As we were leaving for our several berths, (the homes of a night), we were reminded that the big Christmas was yet to come—the Christmas for the kiddies of the train.

The first sound to greet us on waking next morning was "Merry Christmas," closely followed by a childish voice, "When Will Santa Claus Be Here?"

Immediately after breakfast the grown-ups gathered in one end of car 22, while the 14 kiddies gazed with speechless awe and delight at their tree, while not one, but several good Santas loaded them down with dolls, candy, fruit and horns.

A Cosmopolitan Party

If the Christmas Eve party of 44 persons was somewhat cosmopolitan, the children's was much more so, for mingling with the American babies, were three Italians and seven Japanese, whose diamond eyes gazed round with joy and astonishment at the almost unrivaled big black eyes of their Italian neighbors. Local color was supplied, not only by the tree, but the gay assortment of the Japanese-American children.

One little girl of five, the eldest of one family, arrayed in figured blue and white foulard, with scarlet collars and cuffs, set off by a large fluffy pink bow on her shiny ebony pig tails. Small sister, equally brilliant in wine colored cloth elaborately trimmed with lace insertion, topped by the fashionable bobbed hair, so dear to the youthful feminine heart, while baby brother, about a year old—but very large in grey check trousers about six inches long. Their cousins from the state-room, very stylish in yellow and blue check gingham, set off by purple and green hair ribbon—and the other in bright pink, completed a brilliant array of color. The little boy of six months, a perfect picture of a Japanese doll looked as though he had been plucked bodily from the tree itself.

When the children had returned to their respective cars, the passengers of the entire train united in voting this one of the most unique and joyous Christmas parties ever experienced, and all joined in expressions of most genuine appreciation to the instigators of this marvelous Christmas—H. G. Werner, Alfred H. Seal, and S. E. Wirth of San Francisco, and Mr. Johnson of Honolulu, who, while en route from Chicago planned the party, and wired to Ogden for

"CONSCIENCE FUND" GROWS TO TOTAL OF \$1164

Contributions to the "conscience fund" of the Southern Pacific Company, ranging in amounts from 3 cents to \$75 during the year period from 1907 to 1921, inclusive, amount to \$1164.

The contributions came from both patrons and employees of the Company. A. Bakersfield, Cal. resident sent in \$153 to cover additional amount due the railroad as the result of his 13-year-old boy riding from Fresno to Bakersfield on a half-fare ticket. An employee in Los Angeles refunded \$5.13 he received as a result of overcharges on his expense account. Others sent back tools they had appropriated.

Three one-cent stamps were received from a man who unknowingly rode free from Melrose to Havenscourt on the Southern Pacific line. A woman sent \$50 because her conscience troubled her after she had left her six-and-one-half-year-old child to ride free from Missoula, Mont., to San Diego, Cal., and return.

From Portland, Ore., 80 cents was contributed by a man who said he had thrown two barrel covers, owned by the Company, into the Marys River. "When I was a boy," wrote a Klamath Falls, Ore. man, "I took a free ride from Gazelle to Montague, Cal."

"I enclose 20 cents to cover the fare." A number of men who had stolen rides on freight trains, reimbursed the company. Many contributors to the "conscience fund" said they were squaring their accounts with the Company because they had been converted through the efforts of religious workers.

The yearly totals of these contributions follow:

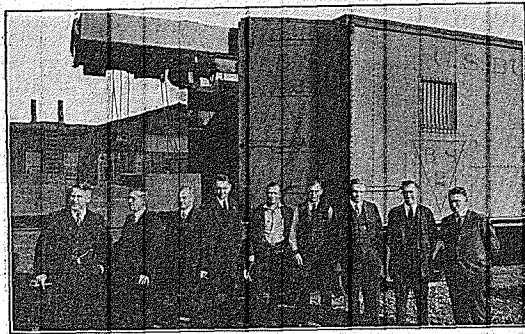
1907	\$	9.75
1908	.....	3.35
1909	.....	52.75
1910	.....	20.00
1911	.....	24.00
1912	.....	29.70
1913	.....	16.30
1914	.....	2.20
1915	.....	58.00
1916	.....	73.51
1917	.....	20.28
1918	.....	26.15
1919	.....	114.34
1920	.....	122.71
1921	.....	41.53
Total	.....	\$1164.67

their tree. Arriving there they hastened to raid the nearest store, and with the hearty cooperation of Gus Shaefer, the steward, who supplied the brilliant fireworks, while the Pullman Conductor O. E. Considine, who arranged the Christmas Car, and many "good fellows" on the train who joined in, evolving a seeming impossible dream into a joyous reality.

Thus, the unselfish desire for others' happiness, which is the real Christmas spirit, boarded the Southern Pacific train in Chicago and traveled with us all to our various destinations, and will live with us forever—an undying memory of Happy Christmas—on the Southern Pacific.

Having read your Bulletin—Pass it along.

BIG MASTER SCALE INSTALLED



U. S. Bureau of Standards car No. 2, with derrick suspended over scale test car, taken at the time of installing the immense Southern Pacific Master Scale at West Oakland. Those who witnessed the first test at Oakland from left to right, are: C. D. Rogers, E. K. Strobbridge, W. R. Sheehan, R. C. Melvin, F. B. Fell, G. A. Easton, Southern Pacific Master Scales Inspector; L. R. Boyer, G. W. Glesseman, H. L. Gibson.

By G. A. EASTON,
Master Scales Inspector

THE MASTER scale owned by the Southern Pacific Company at West Oakland, which is one of the most modern type used in the United States, recently successfully passed the stringent requirements of the United States Bureau of Standards and is now serving its purpose of weighing accurately the railroad track scale test cars, establishing the exact scaling weight which guides the scale inspectors in their tests and inspections. The test was made by F. B. Fell of the Weights and Measures Department, Washington, D. C., and proved the Master Scale to be remarkably well installed and exceptionally accurate. Mr. Fell found all scales to be weighing accurately.

The contract for this immense, though very delicately adjusted, fifty-ton master scale was placed with the Fairbanks Scale Company in 1920, and on July 31 of last year was ready for inspection, the final inspection and acceptance being made late in November. The scale is known as the 12-75, the 12 meaning that all scale pivots and bearings are twelve inches in length and the 75 meaning that each of the two sections of the scale must be good for 75,000 pounds per section, or good for one-half greater weight on the scale than is indicated on the beam, which has a registered capacity of 100,000 pounds.

The scale is 16 feet in length and is installed in a water-proof scale pit in order to protect the scale from the elements. This is necessary because of the sensitivity of the huge instrument. The sub-frame is built of heavy channel irons strongly braced

and tied to prevent any give or strain. The weight bridge is built of 24-inch steel "I" beams and is also braced and tied with heavy angle and channel irons. The sub-frames and weight bridges were constructed by the Southern Pacific scale forces in the shop at West Oakland and were installed under the supervision of the General Scale Inspector of the Pacific system.

First of Its Kind

This master scale, being in two sections only, and the first one of its kind ever constructed, a doubt was expressed by a number of scale experts as to its giving satisfaction and weighing within the tolerance allowed by the Bureau of Standards. The tolerance thus allowed is only six pounds on 80,000 pounds, and also the scale must hold its balance while running the 80,000 pounds on and off the scale without the scale being wedged.

Much interest was taken in this scale by the Bureau of Standards and scale manufacturers and among those present at the test, besides Mr. Fell, was Mr. Melvin, Superintendent of Weights and Measures of California; E. K. Strobbridge, of the State Department of Weights and Measures; W. R. Sheehan, Superintendent of the Transcontinental Freight Bureau; Mr. Boyer, Engineer of the Fairbanks Scale Company of Chicago, and officials of various roads. The test was continued over three days, during which time the scale passed the graduation test of from one pound to eighty thousand pounds and showed an accuracy of within one and six-tenths pounds, with a weight of 80,000

pounds. Mr. Fell pronounced the scale as being one of the finest and best scales installed and in use in the United States.

Probably very few in the railroad service realize what this test is, or just what sort of requirements the scales are held to. Few realize that a stop watch is used on the movement of the scale beam while it is in motion with a load on or off the scale. The tests with weights of from one to eighty thousand pounds, graduated test, were made in five positions on the twelve-foot weight rail and with a specially constructed truck with a wheel base of five feet. In all one hundred and eighty-five tests were made before the scale was pronounced as having met the requirements.

Annual Inspection

The scale is under the jurisdiction of the Bureau of Standards and will be tested once a year by the Bureau's testing equipment, which is the only equipment that can test master scales. If the next inspection and test shows an error in the accuracy of the scale, it will be rectified by the Bureau of Standards, assisted by the Scale Department of the Southern Pacific company.

The master scale is used about six or eight times a year to weigh the Southern Pacific master track scale test cars, which have a wheel base of six feet, four inches. These weights are taken by the California State Department of Weights and Measures. The test cars are used by the Southern Pacific and private-owned track scales, also track scales on the North-Western Pacific, Arizona Eastern, Pacific Electric, Sud de Mexico Inter-California, Trona Railroad, Cornelia & Gila Bend Railroad, San Joaquin and Eastern, Yosemite Valley, McCloud River, Iron Mountain and Tonopah & Goldfield Railroad.

During the trip of the Bureau of Standards testing equipment, Southern Pacific track scales from Sparks, Nev., to Los Angeles, were inspected and tested and all passed with a very satisfactory test, considerably below the 180 pounds tolerance allowed on a 100-ton track scale.

BOOK BY S. P. MAN VALUABLE ADDITION TO THE LIST

A valuable book which should have been included in the list of books on railroad operation published in the December number of the Bulletin is a volume on "Train Operation" by William Nichols. It should be noted that Mr. Nichols is an employee of the Company, having been chairman of Board of Examiners, Southern Pacific Company for over fifteen years.

The book is a treatise on train rules, train orders, change of time table, automatic block signal, interlocking signals, with examination questions and answers.

The second edition of the book was printed in 1920. It was published by LeGrand Brown, P. O. Box 405 Rochester, N. Y., and P. O. Box 405, San Francisco.

PERSONAL SERVICE OFFERED BY S. P. ON EUROPEAN TRIP

Attention has been drawn to the excellent system of personal service rendered by the Southern Pacific Company to passengers to and from Europe, by J. Poston, General Agent, New York.

The traveler can purchase a ticket to Europe and return, through any Southern Pacific representative, or should a person desire to pay for the passage of travel or relative in Europe, the cost of such transportation can be deposited right here in America with the nearest Southern Pacific representative, and the Southern Pacific lines will do the rest. An order for the transportation is purchased and sent to Europe. The relative or friend then presents the order to the steamship line and receives passage to New York.

Arriving at New York, the traveler holding Southern Pacific prepaid order is met at the pier or at Ellis Island, and arrangements are made for the journey to destination. The passenger agent will be personally responsible for seeing that the traveler is conducted to the proper ship or Southern Pacific steamer and every arrangement made for a comfortable and pleasant trip west.

If the Washington-Sunset route has been selected for the trip, the traveler will be taken along the trip for Washington, D. C., and upon arrival there will be met and put aboard the through tourist sleeping car, or other car chosen. This through tourist car is ideal for strangers or families, going from Washington to San Francisco without the necessity of changing cars if the traveler is destined for either Los Angeles or San Francisco, or any other station at which the Sunset Limited is scheduled to stop.

In addition to this through rail service, the big, steel Southern Pacific steamships plying between New York and New Orleans provide excellent cabin and stateroom accommodations. The passenger fare includes meals and berth aboard ship, and the voyage of "100 Golden Hours at Sea" is delightful. The steamer makes connections at New Orleans with the fast through trains of the Sunset Route to points in Louisiana, Texas, New Mexico, Arizona and California.

Mr. Poston states that the Southern Pacific company representatives will be very glad to assist American travelers going to Europe, and that the Southern Pacific European agents will be ever ready to answer inquiries regarding return journey, which service will prove of great assistance to Americans abroad.

An Old Story

Irate Visitor—Mr. Editor, I've been told that you've printed in your paper that I am the greatest swindler the world has ever known.

Editor—No sir! Not in my paper. It contains only the latest news.—Exchange.

SHOPS MUSICIANS

(Continued from Page 10)

have been welcomed by any musical organization in the city.

The two organizations have done a wonderful work in promoting harmony and fellowship among the employees. They have been given every possible moral support of local railroad officials and by the management generally, and it is only reasonable to expect that as time passes, interest and effort will increase and inestimable benefits will be realized.

Helped Welcome Pershing

When General Pershing and his staff came to Sacramento and was given a reception in the State Armory, the band and glee club alternated in furnishing musical numbers during the evening.

In November 1920 the glee club gave a concert in the Greek Theater on the University of California campus at Berkeley. The concert was a great success although weather conditions were unfavorable.

In December 1920 the band and glee club backed by the "Sacramento Union," a Sacramento newspaper, launched a drive for funds for the Salvation Army and in five days raised \$3600, this sum being made up of small contributions received when the organizations "passed the hat" after

Early Road Opening

A reminder of the old days during the early growth of the Southern Pacific Company is contained in a clipping received by the Bulletin taken from the Sacramento Union of August 10, 1869 describing the opening of the "Western Pacific" line from Sacramento to Stockton, which was called a part of the Southern Pacific Lines. The item is as follows:

"The first passenger train to Stockton over the Western Pacific Railroad left this city about 10 o'clock yesterday morning.

It consisted of three cars, quite well filled with excursionists drawn by the locomotive C. P. Huntington. The road between this city and the Mokelumne was found to be in excellent condition, completely fenced in, smooth and well ballasted, principally with gravel.

Beyond that river the track, having just been laid, was of course rough and toward the extreme end the rate of speed was necessarily slow. The terminus of the road, which was in the suburbs of the town close to the asylum, was reached about 1 o'clock."

concerts in hotel lobbies, theaters or other places of public assemblage.

The two organizations and the members of the shop forces at Sacramento also raised \$3000, to equip a playground for the Sacramento orphanage. Many letters of appreciation have been received by the organization. Mrs. Swain, who was chairman of the Ways and Means Committee for San Francisco's Music Week, and who was stated before, was instrumental in having the band and glee club come to San Francisco, said that the members of the glee club had every appearance of professional artists who had been on the concert stage for many years, that they had the musical attitude, and as for the voices, she had nothing but the greatest admiration. She is the authority of a recent statement that a number of big companies in San Francisco are planning the organization of similar glee clubs and bands. Other musical critics in San Francisco who heard the glee club and band have commented most favorably on their work. The work of Mr. Weida, the musical director has been characterized as most unusual. Mrs. Weida is one of the soloists for the club.

Letter of Appreciation

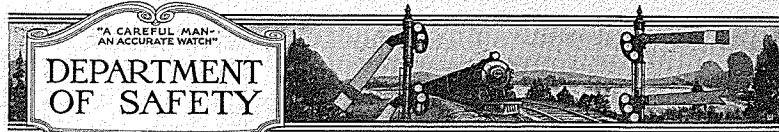
Governor Stephens, this last month, wrote a letter to Mr. Weida, expressing his pleasure at having heard the two organizations, and his appreciation for their contributions to the community life of Sacramento. The City Commission of Sacramento in 1920 passed a resolution expressing the thanks of the people of Sacramento for the community activities of the glee club and band, and for their charitable activities.

An unusual tribute to the work of the band and glee club was expressed in January, this year, by E. C. Hart, A. J. Burnett and W. M. Finch, Justices of the District Court of Appeal, Third Appellate District, in a joint letter to Mr. Weida. The Justices expressed the conviction that it was the duty of all the citizens of Sacramento to join in a cordial and hearty commendation of the "splendid work" of the two organizations.

A. D. Williams, Superintendent of Motive Power, Northern District and D. S. Williams, Superintendent of the Sacramento Shops on the first of the year sent a letter of best wishes to the two organizations. A brief portion of the letter is as follows:

"During the past year we have watched activities of your organizations with great pleasure. You have given freely of your service not only to the railroad employees but to charity and for various civic activities. These activities have lead to much favorable comment and this has been of very considerable advantage to the Southern Pacific Company. We consider your organizations a big asset to our shops."

Having read your Bulletin—Pass it along.



December Safety Meetings

SEVEN Safety Committee meetings were held during the month of December, attended by 257 Committeemen and visitors; 437 safety suggestions were discussed; 7 talks on accident prevention made by Committeemen; and reports received to the effect that 2,119 employees were talked to individually by Committeemen on safety matters. Details are shown in following statement:

Date	Committee	Attend	Sugs.	Talk by
Dec. 5,	Sacramento Gen. Shops & Stores	43	172	B. E. Hannah
Dec. 13,	Salt Lake Div. Terminal & Shop	33	67	R. E. Bench
Dec. 15,	Los Angeles Gen. Shops & Stores	27	28	W. C. Peterson
Dec. 17,	Tucson Division	55	33	F. P. McDonald
Dec. 22,	Steamer	59	9	J. A. Buchenery
Dec. 22,	Coast Div. Terminal & Shop	57	29	J. F. Funk
Dec. 23,	Western Division	33	49	C. D. Berry

Supervisor of Safety J. B. Monahan talked before the Western and Tucson Divisions, Sacramento and Los Angeles General Shops and Stores and the Coast Division Terminal-and-Shop Safety Committees.

2024 Safety Suggestions Approved in 1921

DURING the year 1921, 149 safety meetings were held, attended by 3769 committeemen and visitors, at which 3004 safety suggestions were discussed, 141 papers on accident prevention read and reports received to the effect that 40,172 employees were talked to individually on safety matters.

Following shows standing of various committees:

Committee	Number of Safety Suggestions Made			Total
	Approved	Disapproved	Pending	
Coast Division	91	28	34	153
Coast Div. Terminal & Shop	39	15	12	66
Los Angeles Division	23	13	5	41
Tucson Division	70	6	12	88
San Joaquin Division	32	18	19	69
Stockton Division	48	7	12	67
Sacramento Division	79	17	29	125
Sacramento Div. Terminal & Shop	79	17	29	125
Salt Lake Division	66	58	26	150
Salt Lake Div. Terminal & Shop	236	64	34	334
Shasta Division	59	13	19	91
Western Division	81	22	23	126
Portland Division	102	39	8	149
Portland Div. Terminal & Shop	42	24	16	82
Sacramento General Shops & Stores	562	59	117	739
Los Angeles General Shops & Stores	129	72	13	214
Steamer Division	129	72	13	214
Total	2024	517	463	3004

DECEMBER CHANGES IN SAFETY COMMITTEE

Following changes have been made in Safety Committee: Eldon Chipman, Pilot Steamers, vice, R. S. Sommers; J. Nethercott, Foreman Steamers, vice, William J. Mills; C. S. Jones, Storekeeper, Salt Lake Division Terminal and Shop, vice, J. F. McAulley; J. H. Downey, Engineer, Salt Lake Division Terminal and Shop, vice, C. C. Walker; C. C. Miller, Conductor, Salt Lake Division Terminal and Shop, vice, J. N. Severne; J. M. Herstine, Fireman, Salt Lake Division Terminal and Shop, vice, L. M. Mosier; L. T. Booth,

Brakeman, Salt Lake Division and Shop, vice, C. L. Jackson; W. H. Merchant, Shopman, Salt Lake Division Terminal and Shop, vice, J. McNamara; G. Karman, Fireman, Coast Division, vice, C. F. Bair; W. S. Corbin, Engineer, Coast Division, vice, H. M. Fuller; F. L. Burdick, Yardman, Coast Division, vice, W. E. Graves; H. Hinch, Yardmaster, Coast Division, vice, M. E. Keeney; F. W. Sipe, Conductor, Coast Division, vice, G. W. Nicholson; W. T. Billings, Brakeman, Coast Division, vice, C. F. Peters; J. F. McAulley, Division Storekeeper, Portland Division, vice, H. J. Smith; J. K. Parkinson, Secretary, Salt Lake Division, vice, J. W. Mur-

System-Wide Awards of Safety Medals

Following past practices, the Southern Pacific Company will soon award safety medals to the six employees of each division or general shop who during the period from March 1, 1920, to December 31, 1921, did most towards furtherance of safety work. The basis of the awards will be as follows:

1. For each practical suggestion involving a change in standard, new work or which required actual labor to correct and which indicated thoughtful attention by employee, 15 credits.

2. For each suggestion which in the opinion of Superintendent warranted instructions to employees but not involving actual labor to correct and not previously covered by instructions, 10 credits.

3. For each suggestion which in opinion of Superintendent warranted instructions to employees and which had previously been covered by instructions but which did not involve actual physical labor, 5 credits.

4. For each suggestion made but not adopted, 1 credit.

dock; H. M. Lanot, Yardman, Salt Lake Division, vice, O. M. Kendall; W. E. Quillinan, Engineer, Salt Lake Division, vice, G. A. Lashus; L. R. Brown, Conductor, Salt Lake Division, vice, R. Linton; E. E. Truman, Fireman, Salt Lake Division, vice, A. Reed; R. D. Tansil, Brakeman, Salt Lake Division, vice, J. W. Gorman; J. T. Biddell, Shopman, Salt Lake Division, vice, Rex LeMasters; J. F. Brown, Division Storekeeper, San Joaquin Division, vice, J. Neph; W. A. Reid, Brakeman, Stockton Division, vice, H. A. Benton; L. Broker, Yardman, Stockton Division, vice, H. M. Ballenger.

Ambiguous.

A clergyman about to enter a bus noticed a gentleman seated in the corner and who had celebrated rather too well.

"Do you allow drunks in your bus?" he asked the conductor. "Well, not as a rule," said the conductor, "but slip in quietly."—Exchange.

AVOIDABLE ACCIDENTS CITED ON PACIFIC SYSTEM

Striking examples of the result of carelessness are shown in the following list of avoidable accidents:

A carpenter helping roll concrete pipe to point in ditch where it was to be placed, carelessly allowed hand to remain on end of pipe while rolling by another pipe; hand was caught severely, bruising fingers. Accident could have been avoided by doing work in a careful manner.

A mail handler unloading mail from car placed his hand as he thought against side of car, but instead shoved hand through window cutting wrist. Care in seeing where hand was placed would have prevented accident.

A mail handler working on flanger placed an iron bar against piston, and neglected to remove same when instructing other carmen to turn on the air, resulting in piston shooting out and knocking bar into his face. A little thoughtfulness on the part of injured party would have prevented the accident.

A tinner was riveting tin roofing and had placed tin on iron plate to clinch rivet. In shifting tin to place another rivet, knocked the iron plate from bench and it fell on his foot, fracturing bone. Injured party had been instructed to place the plate on the floor, in line with usual practice in doing this class of work, and his failure to comply with instructions caused him to be injured.

A car inspector placed track jack under coupler on car to raise same to standard height, and while working on car failed to protect himself with blue flags. Engine coupled onto car and moving it about 15 inches, tearing flesh loose from forearm. Placing of blue flags is not only covered by the rules, but has been the subject of innumerable articles and special instructions.

A passenger director while making rounds of station stumbled over a small hand truck which had been left on station platform. Had injured party been watching where he was walking accident would not have occurred.

A brakeman walking alongside of train bleeding off brakes stepped on a track spike laying near track, spraining ankle. If it was daylight and had injured party watched where he was stepping accident could have been avoided.

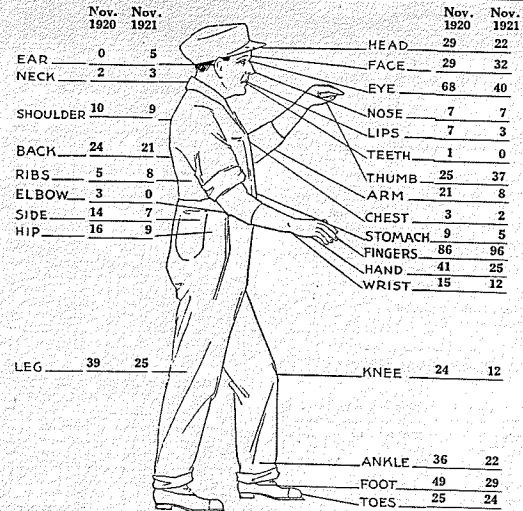
He Will Do

"The shoe dealer was hiring a clerk. 'Suppose,' he said, 'you find a customer to be remark while you were trying to fit her. 'Don't you think one of my feet is bigger than the other?' what would you say?'"

"I should say, 'On the contrary, madam, one is smaller than the other.'"

"The job is yours."—Boston Transcript.

Protect This Man!



THE accompanying diagram shows the number of all injuries to employees occurring to various portions of the body during the month of November, 1920 and 1921, a total of 463 in 1921, compared with 588 in 1920, a decrease of 125 or 21.3 percent.

Of these casualties 153 were reportable to the Interstate Commerce Commission in November 1921, and 223 in November 1920, a decrease of 70, or 31.4 percent.

Casualties reported to Interstate Commerce Commission, on locomotive mile and man-hour basis shows as follows:

Train and Train Service Casualties per 1,000,000 Locomotive Miles—

November, 1920	13.89
November, 1921	11.72

Decrease..... 2.17, or 15.6 percent

Non-train Casualties per 1,000,000 Man-Hours—

November, 1920	18.03
November, 1921	13.43

Decrease..... 4.59, or 25.5 percent

Results are gratifying and a continuation of close attention to safety rules on the part of employees and proper supervision on the part of officers and supervisory forces will show further reductions.

LION CUBS ON S. P. TRAIN

Two lion cubs were included in the baggage of H. A. Snow, Oakland, Cal., big game hunter, who returned home from Africa December 13, traveling west from New Orleans on the "Sunset Limited."

Having read your Bulletin—Pass it along.

NEW MAP OF OREGON

An interesting folder map of the State of Oregon, with reading matter exploiting the state's resources, has just been issued by the General Passenger Department of the Southern Pacific Company at Portland.



OF INTEREST TO AGENTS

FILE TELEGRAMS EARLY TO AVOID CONGESTION

Under the caption "File early and frequently-use judgment in classifying your telegrams-help avoid congestion", E. Entelmann, superintendent of telegraph, has issued the following notice to heads of departments:

"Effective date have reduced force in our General Telegraph offices to minimum, and to avoid congestion, will you please have your telegraph business filed early and frequently, taking advantage of the classification feature, that we may cooperate with you in keeping your business moving, rather than contend with congested conditions in the latter part of the day."

AS ROAD PROSPERS SO DO WE WRITES S. P. AGENT

"Appropos Mr. Fee's circular 1358, referring to the dining car service of our road, I would like to say that I feel that no man is a loyal employee who allows any chance to get by when he can say a good word for the Southern Pacific," writes C. Malachowitz, agent at Caliente. "If we have our own welfare at heart, we must have the welfare of our road at heart; it's a strictly selfish proposition if we want to consider it in a cold-blooded way, for, just as our road prospers, so do we, the employees."

TICKET CLERK'S COURTESY IS HIGHLY COMMENDED

Appreciation of the courteous and prompt services rendered by a Southern Pacific ticket clerk at Eugene, Oregon, is expressed by R. K. Zane, Manager Pacific Coast Department, of Eli Lilly & Co., in a letter to Charles S. Fee, Passenger Traffic Manager. Mr. Zane said that during his many years of travel over the United States he had seldom been served with such courtesy, and pointed out that employees of this character are valuable assets, assisting to a very great extent in influencing the traveling public to patronize the company's road.

CORRECT DATES OF RATES

In an item on the summer excursion fares from California points to eastern destinations to be granted by the Southern Pacific Company and appearing in the January issue of the Bulletin, it was stated that the rates would be effective from June 1 to October 15. The effective dates should be from June 1 to August 15.

S. P. MEN AID DISTRIBUTION OF GIFTS TO POOR

Southern Pacific Agents and Section Foremen along the Coos Bay Branch cooperated with the Eugene Elks Christmas committee in distributing baskets of food and gifts to needy families on Christmas Day. Owing to mills being closed down in some of the smaller towns, a large number of families were given a happy surprise.

Arrangements for stopping the morning train at all points on December 25 to assist the distribution were made by I. T. Sparks, District Freight and Passenger Agent, who wrote: "All the little girls and boys in my district, away out in the tall and uncut, had Christmas presents—and the S. P. train was their Santa Claus."

S. P. MEN AT JUNCTION CITY URGE JITNEY ORDINANCE

A jitney regulating ordinance, similar to that passed at Newberg and other Oregon cities, was recently approved at Junction City, Ore., following representations made by J. W. Gaines, Agent, and other Southern Pacific employees. The ordinance requires automobile truck and bus lines operating through Junction City to obtain a franchise from the city.

Any Other Words Would Have Been Useless

H. B. Brau, Telegraph Operator for the Southern Pacific Company at Reno submits the following:

Teacher: "Tommy, have your folks taught you how to write?" Tommy: "Yes'm."

Teacher: "All right, please step to the board and show us what you can do."

Tommy steps up to the board and prints in a very respectable manner the word "on".

Teacher: "Very well, now what else can you write?" Tommy prints the word "time".

Teacher: "Splendid, go on and write us some more."

Tommy: "Can't, that's all I know."

Teacher: "Well, that is peculiar. Where did you learn to write these two words?"

Tommy: "My pa's agent for the S. P. and I mark up the Bulletin board."

KIRKHAM FORCE, OAKLAND, PRAISED BY SHIPPERS

W. Merriman, Terminal Agent in Oakland, has recently received several letters of commendation from shippers who have been pleased with the cooperation and assistance rendered them by the Kirkham street forces. W. H. Pinkston, of the Lawrence Warehouse Company, San Francisco, writes that, "a less hearty cooperation would have meant that the shipment would have missed the ship," and W. N. Rolph, vice president of Griffith-Durney Company, San Francisco, expresses appreciation for the services rendered, free of cost, in wiring ahead arrangements for a prompt delivery of cars.

LOSS AND DAMAGE EVIL IS DISCUSSED AT PORTLAND

Portland Division Loss and Damage Meeting was held in the Assembly Room, Union Station, Portland, Ore., on December 14. Fifty-three representatives from various branches of the service were present. R. C. Fagan, Superintendent of Freight Protection, and L. B. Moore, General Chairman of the Division Committee, organized for the prevention of claims, ably conducted the meeting.

Practically every phase of freight handling was discussed and included in the events of the day was a talk by E. C. Byford, Inspector of the Bureau of Explosives, attention being directed to new regulations soon to be issued.

Some time was spent in perfecting the divisional organization formed to combat the evil of loss and damage, Mr. Moore expressing his belief that the present organization was far superior to the previous one, and that other divisions would have to look to their laurels.

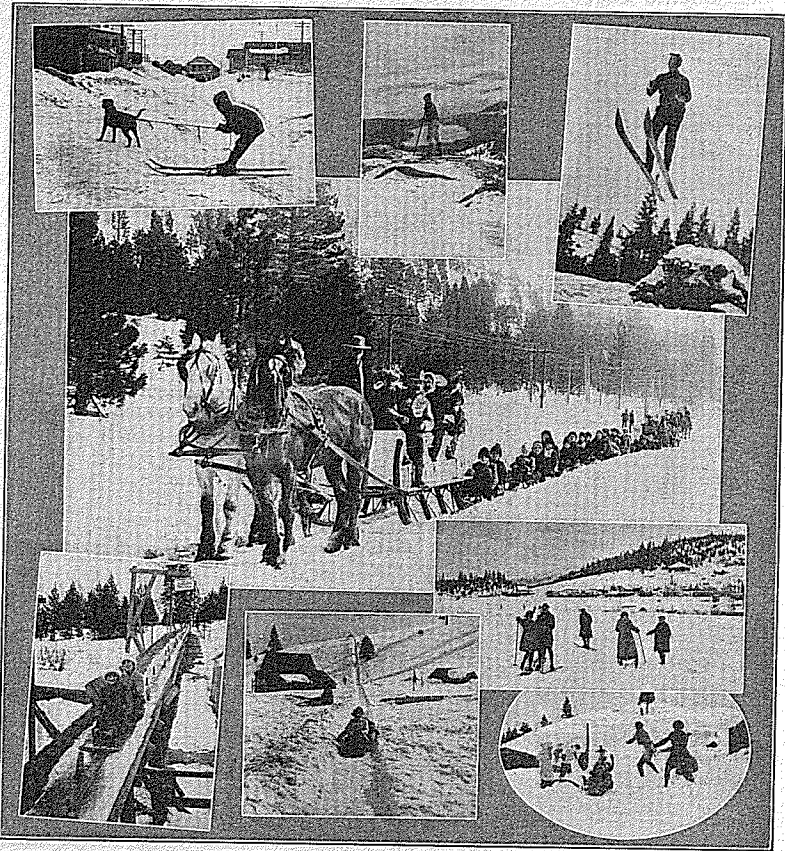
PORTLAND DIVISION CLUB HOLDS DANCING PARTY

The Holiday Dancing Party of the Southern Pacific Club, Portland Division, was held in Christensen's Hall, Portland, December 28th.

A good crowd was in attendance, even though counter attractions during the holiday season were many. Attractive invitations had been previously sent out, which, in many instances, were preserved as Christmas remembrances of the Club.

The Club is making plans for other affairs to be held in the near future.

Truckee Winter Sports Lure Snow Strangers



Skis and toboggans find ready use only a few hours from the orange belt. Most of the above pictures are self explanatory. The one in the center of the top row shows Donner Lake in the distance. The big picture in the center might have been taken in New England in mid-winter, but it wasn't. The lower left picture shows the toboggans being hauled to the top of the slide by cable.

THE thrill of winter sports is the lure that is attracting thousands of California and Nevada residents, most of them strangers to snow, to Truckee, Cal., this season. Every week-end Southern Pacific trains carry large crowds to the mountain resort.

W. L. Maynard, manager of the Southern Pacific hotel, predicts that

the cold weather, suitable for tobogganing, skating, skiing and sleighing, will extend further into the spring months this year than usual, inasmuch as the snow began to fly somewhat later than in past years.

Truckee is a picturesque little town, near the tip-top of the high Sierra. Many evidences of the "wild and woolly" pioneer days still may be seen

and trips to Donner Lake, named for the party of argonauts that met a tragic fate in the snows while attempting to come to California, and other historic scenes are of interest to the visitor.

The winter sports are under the general direction of W. B. Gelatt who says conditions this season are more favorable than for some time past.

Sacramento Shops

(Continued from Page 8)

During the past year we have used on new locomotives alone 12,128 valves and pipe fittings and 24,800 feet of iron pipe. In the shops and yards there is over 65 miles of pipe ranging from 12-inch down in diameter. This pipe is used for the distribution of water, steam, gas and compressed air.

Electric Development

Electric energy was first made use of at these shops in May, 1889, when one 35-light arc dynamo and one 500-light incandescent alternating dynamo were installed. These machines were run by a high speed steam engine and furnished light for seven years. When the first hydro electric power plant was installed at Folsom 25 miles away and electric energy brought by a long distance transmission line to Sacramento it was decided to shut down this steam driven plant and purchase power. On August 10, 1896, the first electric motor was installed at the Sacramento Shops in our spring shop. This was a 10 horsepower motor and is still in service on a machine in the rolling mill, having given 25 years of continuous service. During the same year four more motors were installed, all of which are still in service. Since that time more and more electric power has been installed until we now have a total horse power of 24,000.5. These motors range from 3/4-horsepower to 400 horsepower and there are 409 of them. We also have four electric welders in constant use. The amount of work which we have for these welders to perform makes it necessary to keep them in operation during the whole 24 hours, and still more of them are needed. There is also an extensive fire alarm system protecting the shops, with 16 general firm alarm boxes and 23 still alarm boxes of the Gamewell type.

Passenger Car Department

The Sacramento passenger car shops today have nine tracks accommodating our largest cars with ample room to work in and around them. On these tracks the heaviest of our work is done. Our truck shop is one of the best equipped shops in the country for passenger car trucks and there are four tracks in this shop with overhead geared pneumatic hoists for lifting the trucks for the purpose of running the trucks from their wheels and thus saving much time and work as without them the trucks would have to be handled by jacks.

Upholstery Shop

Our upholstery shop is a complete factory in itself. It would be a long task to enumerate the many articles manufactured in this department. Canvas hose for filling locomotive tenders, engine seat cushions, mattresses and furniture, and an estimate shows

that 78,420 articles are manufactured here for shipment in a year.

When a car is shopped for general repairs all upholstery must be first removed—seats, cushions, rubber matting, curtains, etc. These are all thoroughly cleaned and renovated so that they are as good as new. All hair is removed from cushions, re-stuffed and sterilized. Feathers are also treated by passing through a steam renovator.

One of the new industries taken up by this department is the vulcanizing of rubber. This is making wonderful progress in reclaiming old rubber matting, etc., which in the past, when badly worn, had to be cast aside.

Plating Department

The electro-plating department performs all classes of plating work, so essential on all modern railroads. Everything possible is done in this department to perform this work economically and thoroughly, and it may be said that this is one of the most efficient plating rooms of any large railroad shop.

Seven hundred locomotive headlight reflectors have been resilvered here during the past year. There are from 500 to 750 pieces of silverware on each dining car. Approximately 26,000 pieces of silver are replated during the year. This does not cover the tableware used in depot restaurants or on ferry boats.

The cleaning and polishing of all interior trimmings from passenger coaches is also taken care of in this department.

Car Machine Shop

This shop is ordinarily known as the wheel shop as it fits up all the cast iron and rolled steel car wheels used under cars, locomotives and tenders. It handles, approximately 100 pair of cast wheels per day in addition to the rolled steel wheels and a large amount of machine work which pertains strictly to cars. All car wheels come to this shop, the

wheels are taken from the axle, and if either wheel or axle is in condition to be used again are fitted up to be put under other cars. A few days ago a pair of cast iron wheels came to this shop for dismounting. On looking at them it was discovered that the wheels were cast in the year 1868.

Car Paint Shop

The car paint shop has track room for 23 cars. Here the cars are thoroughly renovated, cleaned, varnished, and made ready for service. On wood coaches, when paint has become worn and cracked, it has to be removed by the burning process. When steel cars become corroded and the paint worn out they have to be sand-blasted under very careful conditions. This necessitates the same painting procedure as on the wood car.

The Sacramento paint shop is not only a paint shop for cars but is a supply house for the whole system, in bulk orders from all parts of the system being taken care of in this department.

Furniture glass, mirrors and signs for all purposes are made here. We mix paints of all kinds and for all railroad purposes. During the past year ten thousand gallons of assorted paints have been mixed for the Maintenance of Way Department for division use.

Over 500 mirrors of all kinds and sizes are manufactured here during the year as well as art glass, filling orders from all parts of the system. A large saving is made by substituting glass made from old gothic sash. This glass is first sand blasted and then dyed green, bringing it near the color of the rough green glass, and is much more durable as it is plate glass.

In addition to the car paint shop where all passenger cars are handled there is a small paint shop known as the locomotive paint shop which takes care of the painting of locomotives and tenders. In old times locomotives, particularly those on passenger runs, were made very brilliant by the art of

the painter. Red, green and other bright colors were used and the sides of the tanks and the headlight were decorated with truly artistic pictures. This is now all done away with and a plain coat of black paint, with varnish to protect the surface, is all that is desired.

Freight Car Repair Work

Freight car repair work has developed along with the increased demand until today we have about 1200 freight cars passing through these shops for repairs each month. These shops as a rule does not appeal to visitors and others but it is the backbone of the plant. The freight car earns the money paid the men on our rolls. Freight equipment has changed very greatly in the last 25 years. Frequent to that time all cars were practically of 15 to 25 tons capacity and of all wooden construction, and were used in 20 to 30 car trains. Now nothing is built less than 40-ton capacity and all new cars are of steel construction, steel underframe construction. This is necessary for the reason that they are handled in many cases in trains of 100 cars.

Store Department

All raw material for use in the industries and for use in manufacturing material on store orders in the various shops, all of our material and all material required in the construction of new cars and locomotives is handled by what is known as the "Store Delivery Service" under the jurisdiction of the store department. All finished material is manufactured in the industries and all finished material manufactured on store orders is taken from the shops by this same service.

To efficiently handle this material, the Store Department has seven auto-motors and seventy trailers of various capacities, and sixty-five men. The equipment handles the heavy material, the lighter material is delivered by men on foot with trays and push carts made for the purpose.

The Laboratory

In any large company or concern that purchases or manufactures a large amount and variety of material, a prime requisite for safety, economy and convenience, is that the material furnished be the best suited for the purpose used. To insure this many tests are required, physical, chemical and mechanical, apparatus for making same and a corps of men trained in this work. Such is the equipment and personnel of the laboratory.

The work of this department has to do with all branches of the railroad, operating, maintenance, and operating, mechanical and stores, and requires of the laboratory force familiarity with the vicissitudes and requirements of all these departments. The laboratory analyzes and tests the paints that are used on buildings, bridges and rolling stock, both passenger and freight. In the rolling mills, steel furnaces and foundries

Distinguished Service Order Is Your Name Here?

LOS ANGELES DIVISION

H. A. Sullivan, conductor; C. E. Girard, Frank Downey, R. C. Stewart, J. C. Downey, Cal., for removing car of shooks off spur track upon noticing that some barrels of burning kerosene had thrown on to spur from warehouse which had caught on fire, contents taken no doubt saving car and contents.

H. W. Mitchell, conductor, and B. R. Crowley, brakeman, for detecting by close observation peculiar sound coming from wheels under car in their train and instructing engineer to not exceed speed of 18 miles an hour to terminal, at which point inspection developed that the wheels were scamy, necessitating removal.

A. H. Ross, conductor; W. H. Donoho, C. A. Wood, brakeman, for quickly responding to short call for extra work, resulting in train leaving promptly for scene of trouble due to washout.

M. G. Green, brakeman, for discovering broken valve on refrigerator in his train due to close inspection, which action permitted car being handled behind caboose into terminal without further hazard.

J. S. King, passenger brakeman, for discovering brake beam down on tourist car, his close inspection and action taken no doubt preventing derailment.

Henderson, brakeman, and H. C. Patterson, yardman, for interest displayed in looking properly open switch to private industry until it could be attended to by section foreman, thereby eliminating serious hazard.

F. S. Watkins, engineer; D. L. Sullivan, fireman; W. S. Dressler, engine foreman; M. Ross, assistant engine foreman, for valuable assistance rendered in saving costly property endangered by fire which destroyed the belonging of Globe Mill.

F. S. Watkins, engineer; E. M. Fink, fireman, and L. P. Woodruff, yardman, for responding promptly to fire alarm by engine whistle, proceeding to nearby station and extinguishing blaze in car of cotton at gin.

P. R. Cook, signal maintainer, for action taken in clearing up telegraph wires which were in trouble, thereby maintaining delay to telegraph business.

Armstrong, brakeman, for detecting oil on rail at his station after departure of engine and notifying all concerned promptly in order to correct condition.

L. J. Pletke, utility clerk, and W. L. Somers, warehouseman, Santa Ana, for action taken recently during heavy wind storms, re-

sulting in telegraph pole being broken down, by clearing wires and bracing poles in such manner that telegraph service was uninterrupted.

C. Taylor, clerk, River Station, for accomplishing diversions on car of oranges and live poultry, although diversion orders carried wrong numbers, but by display of proper interest mishandling and delay was avoided.

J. Huntsman, section foreman; J. L. Fiter, by clearing wires and bracing poles in such manner that telegraph service was uninterrupted.

H. Sullivan, conductor, for valuable assistance in correcting defect on engine which permitted locomotive to deposit oil on rails resulting in delay account slipping.

McClintock, engine foreman, and Massingill, yardman, River Station, for interest manifested and prompt action taken after discovering pilfered car on private spur by reloading the stolen articles.

J. McEnaney, fireman, Iris, for discovering broken rail in siding and taking necessary action to prevent possible accident.

TUCSON DIVISION

Yardman A. C. Williamson for energetic action taken at time of fire to protect company property.

Brakeman A. F. Corkran for his discovery of cracked intermediate iron on freight train, broken rail in stock track at station.

Engineer C. P. Kramer and Fireman J. P. Newman for assistance rendered in case of passenger train to re-brass hot journal on baggage car.

Section Foreman D. B. Perkins for discovering blazing hot box on car in passing train, signaling train crew that corrective measures might be taken.

Fireman T. J. Delehanty for prompt action taken in providing another fireman for station boiler when regular fireman was incapacitated.

Engineer C. A. Thumm and Fireman P. E. Sticker for assisting train crew to repair steam hose on car in train, thereby assisting train to keep their schedule and expedite the movement of their train.

Car Foreman Chas. Leon for the assistance rendered in case of fire to re-brass car in passenger train. This man was not on duty at the time and offered his service in the interest of the Company.

Car repairer D. McIntyre for offering services and helping re-brass car in passenger

it is required that materials used, coke, sand, quartz, feldspar, magnesite, tin, lead, copper, babbitts, etc. be of required and desired quality. It has to do with every item of the approximately million dollars' worth of material purchased each month by the store department at Sacramento which is the distributing point for the system.

Office Force and Drawing Room

The activities of the shops would be very much hampered without the assistance of our office force to do the bookkeeping and prepare the pay rolls and the drawing room to prepare the drawings and blue prints necessary for the prosecution of many lines of work.

There are some fifty employees in these two departments.

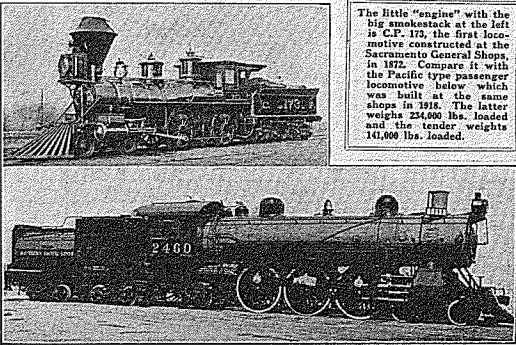
Having read your Bulletin Pass it along.

A few items covering some of the activities of the year 1921 are given in closing:

Total Pay Roll.....	\$4,500,000.00
Iron rolled, lbs.....	60,000,000
Iron Castings, lbs.....	16,000,000
Brass Castings, lbs.....	3,600,000
Steel Castings, lbs.....	525,000
Steel Ingots, lbs.....	12,400,000
Locomotives repaired....	400
Passenger Cars repaired....	624
Freight Cars repaired....	15,000

During the past four years the following new equipment has been built here at an approximate cost of \$5,000,000.

Locomotives.....	53
Freight Cars.....	2,750
Caboose.....	50



The little "engine" with the big smokestack at the left is C.P. 113, the first locomotive constructed at the Sacramento General Shops, in 1872. Compare it with the Pacific gray passenger locomotive below which was built at the same shops in 1912. The latter weighs 234,000 lbs. loaded and the tender weighs 141,000 lbs. loaded.

A Message from President Harding



HERE on my desk I am keeping a photograph of a group of my old friends, taken on my front porch one day the past autumn. It has been a reminder and an inspiration to me many times, a reminder of the unlimited possibilities of American life, and an inspiration to all effort that those possibilities may be preserved and broadened. Let me point out some of them.

Here is a man who started life as a water boy on a railroad construction gang, became a telegrapher, and is now a captain of industry—head of a great industry which he conceived, built and controls.

Next to him is another with a like beginning; a poor boy who had little education and no chance but what he made for himself out of this country's opportunities. He is one of the most important railroad executives in Ohio today.

Here is one of the men who have made Marion; he was a farm boy in this county, didn't know what it would mean to have a dollar to spend freely. Now he is a dominating figure in one of the largest manufacturing industries in the state—an industry whose products go literally all over the world. Down in the bottom row is a young man who came up by the same route. He had nothing, and imagined himself well started toward success when he became a country telegraph operator and station agent while yet a mere boy. He has risen step by step to be, today, general manager of one of the country's great railroads.

So on through the list. No man in that group of nine, apparently, had an even start for success. They all knew the hard ways, the real privations. Their story tells us what America means and why we must make it continue to mean opportunity and inspiration and the reward of merit. Every work to that end is to be commended and encouraged.

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